





Antiquariaat Jule b.v.  
3 fl. 3.500, -- (2 pts)

7054/84 (a)







*Spicilegia Zoologica;*  
OR  
ORIGINAL FIGURES AND SHORT SYSTEMATIC DESCRIPTIONS  
OF  
NEW AND UNFIGURED ANIMALS.

BY JOHN EDWARD GRAY, F.G.S. M.R.S.L.

HONORARY MEMBER OF THE PHILOSOPHICAL SOCIETY OF COLCHESTER, CORRESPONDING MEMBER OF THE MACLUREAN LYCEUM, &c. &c.

LONDON: PUBLISHED BY TREÜTTEL, WÜRTZ AND CO., SOHO SQUARE; AND W. WOOD, STRAND.

THE author having had frequent occasion to lament the inconvenience to which he has been exposed by the want of an appropriate medium through which he might communicate to the Zoologists of this and other countries those novelties in science which have fallen under his observation, has at length determined upon publishing, from time to time at indefinite periods, a series of plates of new and unfigured Species, with short Latin and English Characters and Descriptions. His object will be to render the proposed undertaking, as nearly as possible, similar in plan and character to the "*Spicilegia*" and "*Miscellanea Zoologica*" of Pallas. He cannot, however, flatter himself that its scientific value will be by any means equal to that of those two admirable productions. To follow at an humble distance in the footsteps of so great a man, is all the honour to which he can aspire.

It was his original intention to have printed only a limited number of copies for private distribution; but the wish to render it as generally accessible as possible, and the hope at the same time of repaying himself some portion of the expense, have induced him to extend his plan, and to submit it for public sale.

The favour of specimens of animals or shells, or their loan, will be particularly acceptable; and such contributions shall in every instance be most scrupulously acknowledged.

Each Part will generally contain from Three to Six Plates, and a sheet of closely-printed Letter-press. The Price of publication will be regulated by the Number of the Plates, and will be at the rate of 1s. for each Plate, and the same for each sheet of Letter-press.

### MAMMALIA.

Fam. SIMIADÆ.      Gen. *Cynocephalus*.

*Cynocephalus niger*, Desm.—*Niger*; *capite elongato, cristâ compressâ longâ ornato*; *caudâ brevissimâ*.

*C. niger*, Desm. *Mamm.* 534.

Icon. t. 1. f. 2.

Inhab. India?

Mus. Brit.

I have seen this animal alive in the Tower. Its colour is black; the hair soft, that of the upper part of the head forming a compressed crest; face naked, black; tail very short, tubercular; hands long, fingers short, black. Length of the body 2 feet, of the tail 1 inch.

Fam. CEBIDÆ.      Gen. *Lagothrix*.

*Lagothrix Humboldtii*, Geoffr.?—*Nigro-cinereus*; *pilis mollissimis, crispatis*.

*Simia Lagothrix*, Humb. *Obs. Zool.* 32.?

*Lagothrix Humboldtii*, Geoffr. *Ann. Mus.* xix. 107.?

*Gastrimargus olivaceus*, Spix, *Braz.* t. 28?

Icon. t. 1. f. 1.

Inhab. Brazil?

The drawing, for which I am indebted to the kindness of Mr. E. Griffith, was made by Landseer from a living specimen in Exeter Change. The animal was remarkably active, good-tempered, and obedient.

Fam. PHOCIDÆ.      Gen. *Arctocephalus*.

*Arctocephalus lobatus*, n.—*Osse frontali lato convexo*; *foramine occipitali ovali*; *maxillâ inferiore rectâ*.

Icon. t. 4. f. 2. 2 a.

Inhab.

Mus. D. Brookes.

The skull on which this species is founded differs from that of *P. ursina* (F. Cuv. *Mém. Mus.* x. t. 15. f. 1; and G. Cuv. *Oss. Foss.* v. t. 18. f. 5.) in the greater breadth of the frontal bones; in the forehead being considerably more convex and arched; in the muzzle being thicker and more rounded, and the hinder margin of the lower jaw less angular, so as to allow the head to apply its whole length upon the table on which it is placed. The teeth are also rather more lobed on the edge. The sutures and outline of the bones correspond exactly with those of *P. ursina*.

The comparative measurement of two skulls, apparently from animals of the same age, is as follows.

	<i>Phoca lobata</i> . inches.	<i>P. ursina</i> . inches.
Length of the head from the occipital crest to the end of the nose .....	9	9
Breadth of the posterior part of the head across the petrous portions of the temporal bones ..	4 $\frac{3}{4}$	4 $\frac{3}{4}$
Breadth of the most contracted part of the frontal bone near the cerebral cavity .....	1 $\frac{3}{4}$	1 $\frac{1}{4}$
Breadth of the expanded superciliary processes of the frontal bone .....	3	2 $\frac{1}{4}$
Greatest breadth of the condyles .....	1 $\frac{7}{8}$	2 $\frac{3}{4}$

In all the other measurements both skulls accurately coincide with each other.

Fam. DELPHINIDÆ.

Subgen. 1. DELPHINUS, n.—*Caput globosum*; *rostro depresso, capite longiore*. *Dentes cylindrici, curvati*.

1. *Delphinus longirostris*, n.—*Osse palatino carinato, postice convexo*; *rostro longissimo attenuato, supra depresso, lined mediâ elevatâ*; *dentibus parvis utrinque 4 $\frac{3}{8}$ —5 $\frac{3}{8}$* .

Inhab.

Cranium in Mus. D. Brookes.

The beak is more slender and depressed than that of *D. Delphis*; the palate bone more strongly keeled; and the elevated central process of the upper surface of the beak broad and convex. Length of the head 6 inches; beak  $11\frac{1}{2}$ . Breadth of the latter at its base 3 inches.

2. *Delphinus Capensis*, n.—*Corpore lanceolato; pinna dorsali elevata, falcata; pinnis pectoralibus mediocribus, falcatis; dorso, labiis, pinnisque nigrescentibus; ventre albido; dentibus utrinque circiter  $\frac{3}{8}$ .*

Icon. t. 2. f. 1.

Inhab. Cape of Good Hope, Capt. Heaviside. Mus. Coll. of Surgeons.

The entire length of the animal is 81 inches; his widest girth 42. From the tip of the nose to the angle of the mouth he measures 13; to the angle of the forehead 7; to the blower  $7\frac{1}{2}$ ; to the dorsal fin 38; to the pectoral 21. The length of the dorsal fin is 12, along the curve 12, and its perpendicular height 10; the length of the pectoral along the curve 13, the breadth of its base 5. The breadth of the tail is 18, and the length of each of its lobes along the curve 13 inches. This dolphin is at once distinguished by the shortness of his beak.

*D. Delphis*, *leucoramphus*, *dubius*, *frontatus*, and *Tursio*, (*D. truncatus*, Montagu in Wern. Trans. iii. t. 3.) belong to this division.

- Subgen. 2. *GRAMPUS*, n.—*Caput globosum; rostro depresso, longitudine capitis; dentes cylindrici, curvati.*

To this section belong *D. griseus*, Cuv., *D. Grampus*, Linn., *D. globiceps* (which is the *D. Melas* of Traill, the *D. deductor* of Scoresby), and the following.

3. *Delphinus (Grampus) acutus*, n.—*Osse palatino carinato; rostro longo, attenuato, acuto, supra convexo, centro plano, longitudinaliter profunde sulcato; dentibus parvis, gracilibus, utrinque  $\frac{3}{8}$ — $\frac{3}{8}$ .*

Inhab.

Cranium in Mus. D. Brookes.

The length of the head is 7, that of the beak 8 inches; the breadth of the beak at its base  $4\frac{1}{4}$ .

4. *Delphinus (Grampus) Heavisidii*, n.—*Corpore obeso; fronte obliquo; pinnis brevibus obtusis, dorsali triangulari; subtus fasciis, lineis, maculisque albis, notatus, cæterum totus niger; dentibus parvis, conicis  $\frac{3}{8}$ — $\frac{3}{8}$  utrinque.*

Icon. t. 2. f. 6.

Inhab. Cape of Good Hope, Capt. Heaviside. Mus. Coll. of Surgeons.

The white markings beneath consist of a transverse band in front of, and a triangular spot behind each of, the pectoral fins; and of a longitudinal line on the belly, which separates just beneath the dorsal fin into three equal forks, the central one of which is continued in its direct course, while the lateral ones extend obliquely up the sides. The entire length is 46 inches; that of the mouth 6; from the tip of the nose to the blower  $6\frac{1}{2}$ , to the pectoral fin 12, to the dorsal fin 22. The length of the latter is  $7\frac{1}{2}$ , the curve of its anterior edge 6, its height  $3\frac{1}{2}$ . The pectoral fin measures along the curve  $6\frac{1}{2}$ , across its base  $2\frac{1}{2}$ . The breadth of the tail is 11, its length 4, that of the curve of each lobe 8. The girth of the body in its widest part is  $28\frac{1}{2}$  inches.

5. *Delphinus (Grampus) obscurus*, n.—*Corpore lanceolato; capite obliquo, acuto; pinnis mediocribus falcatis; collo ventreeque albidis, fasciis nigris ab angulo oris usque ad pinna pectorales; strigis obliquis laterali alba postica; cæterum totus niger; dentibus parvis, conicis, utrinque  $\frac{3}{8}$ — $\frac{3}{8}$ .*

Icon. t. 2. f. 2. young. 3 adult. 4 and 5, Crania.

Inhab. Cape of Good Hope, Capt. Heaviside. Mus. Coll. of Surgeons.

The beak is as long as the head; the body is flattened behind, and rounded on the sides; and the fins are black. In a young specimen in the same collection the colours are more defined; but even in the older specimens the white lateral streaks are to be seen

in certain positions,—a fact which is not shown in the drawing. The length of the larger specimen is 73 inches; his greatest girth 20; from the tip of the nose to the angle of the mouth 10, to the blower 10, to the dorsal fin  $31\frac{1}{2}$ , to the pectoral 18; the length of the dorsal fin is 10, its curve 13, its height 8; the curve of the pectoral fin is 13, the breadth of its base  $8\frac{1}{2}$ ; the tail is 17 inches broad, 6 long, and 12 along the curve of each lobe. The young specimen is about half the size, and follows nearly the same proportions; it differs only in the greater length of its fins, which is in all probability owing to the mode of preparing the specimens.

- Subgen. 3. *BELUGA*, n.—*Capite depresso, attenuato; rostro longitudine capitis, in eodem plano.*

This section is formed by the *D. leucas*, Pall.

- Subgen. 4. *PHOCÆNA*, n.—*Capite globoso; rostro capite brevior; dentes compressi, spatulati.*

Comprehending the *D. Phocæna* of Linné.

## REPTILIA.

### Fam. TESTUDINIDÆ.

### Gen. Testudo.

- Testudo Bellii*, n.—*Testa oblonga convexa; scutis marginalibus 24, e paribus 11, cum impari anteriore angusto, posteriore lato inflexo; scutis sterni 11, anteriore producto.*

Icon. t. 4. f. 3. 3 a.

Inhab. Cape of Good Hope.

Mus. nost.

Shell oblong convex; attenuated in front, and slightly dilated and recurved at the margin, which is somewhat compressed laterally, and rounded and inflexed posteriorly. Scuta flattish, concentrically grooved, yellow with a central black spot, and a black margin. First vertebral scutum pentagonal, longer than broad; second, third and fourth broad, hexagonal. Anterior marginal scutum linear, emarginate; posterior broad, quadrate, inflexed. Sternum yellow, blotched with black, as long as the upper shell, broad; the anterior lobe rounded, narrowed, and extended forwards; gular scutum solitary, triangular; the abdominal lobe very large, with a deep emargination behind. Sterno-costal suture extending from the 4th to the 7th marginal scutum inclusive.

The head is furnished with broad triangular plates above the nostrils, and with polygonal frontal scales behind; it has also several lateral scales. The feet are covered with scales of unequal size. Toes 5, 4.

### Fam. CHAMÆLEONIDÆ.

### Gen. Chamæleo.

(Consult Ann. of Phil. 1827.)

1. *Chamæleo Brookesiana*, n. l. c.—*Superciliis elevatis, angularibus, denticulatis; occipite plano, fronte concavo; squamis parvis irregularibus; cauda brevi, basi compresso-incrassata; dorsi lateribus, mento antice, membrorumque marginibus serie squamarum parvarum spinosarum instructis.*

Icon. t. 3. f. 3.

Inhab. —?

Mus. D. Brookes.

Since the time when I described this species in the *Annals of Philosophy*, I have discovered that it had been previously indicated by Kuhl in his valuable *Beiträge*, as a distinct species existing in Mr. Brookes's museum, but without specific character or description of any kind, under the name of *C. superciliaris*. The name which I had given it must still, however, remain, as it is the only one under which it has been characterized. For a full description the reader is referred to my revision of the genus in the *Annals of Philosophy*. Length  $2\frac{1}{4}$  inches; body  $1\frac{1}{4}$ , tail 1. Perhaps young.

2. *Chamæleo dilepis*, Leach.—*Superciliis cristatis; occipite depresso, lobo lato pyramidaliter utrinque postice instructo, squamis magnis rugosis; capitis dorsi gulæ ventrisque carinis magnis denticulatis; occipitis loborumque squamis latis hexagonis planis lævibus.*

*C. planiceps*, Merr. (not Synon.)—*C. bilobus*, Kuhl.

Icon. t. 3. f. 5.—Var. vel ♀? t. 3. f. 4.

Inhab. Africa: Fantee and Gamboon.

Mus. Brit.



Length of the body  $6\frac{1}{2}$ ; tail  $6\frac{1}{2}$  inches. The variety, or it may be the female, has the sides of the head much flattened, the occipital lobes being small and indistinct; in other respects it resembles the other. It is only 8 inches in length.

3. *Chamæleo Tigris*, Cuv. MSS. Kuhl.—*Superciliis cristatis denticulatis; occipite plano carinato; squamis uniformibus, minutis, granulatis; dorso mentoque denticulatis; mento antice lobato.*

Icon. t. 3. f. 2.—head, t. 3. f. 2. a.

Inhab. Sechell Islands, Peron.

Mus. Brit.

This chameleon, a specimen of which was presented to the Museum by Thomas Bell, Esq., is of a slender make, and yellow colour, finely spotted with black. The skinny lobe in front of its chin is covered with rather larger scales. Its length is 4 inches, the tail being equal to the body.

Fam. GECKOTIDÆ. Gen. *Phyllodactylus*, n.

*Digiti 5—5 graciles compressi, ultimo articulo squamâ latâ foliaceâ longitudinaliter fissâ, ungues recurvatos vaginante; pori femorales nulli; caudâ cylindricâ, subtus serie squamarum majorem.*

The toes at once separate this genus from all the other Geckoes; they are thin, compressed, and simple at the base; but the point is furnished with a broad leaf-like scale divided longitudinally in the centre, and sheathing the recurved claw, so that the toes very nearly resemble the last joint of the tarsi of the common house-fly, as represented by Sir Everard Home in his *Comparative Anatomy*; but the claw is single and central. It has no femoral pores, and the tail is cylindrical, scaly, with a row of broad scales beneath. In the *Annals of Philosophy* I described this animal as the genus *Ptyodactylus* of Cuvier, which is very distinct.

*Phyllodactylus pulcher*, n.

Icon. t. 3. f. 1. 1 a. and b. the foot in detail.

Inhab. —?

Mus. Brit. 2 spec.

Upper part of the body and limbs covered with rather large ovate triangular trihedral convex plates; head above granular, scattered with small ovate plates; body and limbs beneath with imbricate broad triangular flat scales; throat minutely granular; limbs short, stout, pale, whitish (in spirits), marbled with brown; scales on the under lip broad and high, front one very large; head 1; body  $1\frac{3}{4}$  of an inch; tail mutilated.

## MOLLUSCA.

Fam. SEPIADÆ. Gen. *Sepioteuthis*, Blainv.

S. ? major, n.—*Corpore subcylindrico, postice attenuato; pinnis lateralibus per totam corporis longitudinem productis, medio extensis.*

Icon. t. 4. f. 1.

Inhab. Cape of Good Hope.

Mus. Anat. Oxford, and Coll. of Surg. Lond.

Body subcylindrical, behind attenuated. Fins lateral, extending the whole length of the body, spread out at the middle. Head depressed. Arms 10; short arms, base with cup-shaped suckers; long arms, base simple; rest of the arms deficient. Bone —? Length of body 27; of head 6. Breadth of body and fins 7 inches each.

This is the largest species which has hitherto been zoologically described. Mrs. Graham speaks of having seen a species, the arms of which were 18 feet long. The crystalline lens of the Cephalopodes is very peculiar; it is ovate-globose, the front end divided by a deep groove, in which are inserted the ciliary processes. They separate easily at this groove, and exhibit internally a series of concentric coats, exhibiting a beautiful golden lustre. Consult Cuv. *Anat. Moll.* f. 5. m. Their eyes appear to have been used as ornaments by the Peruvians, as the Rev. Mr. Hennah has brought to this country several of a large size, which he found in the tombs and old habitations of the natives. Mr. Stutchbury in-

forms me that the natives of the Sandwich Islands sold them to the Russians as pearls.

Fam. VERMETIDÆ? n.

Gen. *Vermetus*, Lam.

Adanson's much doubted description of the animal of this genus is, as certified by this second species, correct; and therefore the place assigned to it by Lamarck is proper. It will most probably form a family, also containing *Magilus* and *Lementina* of Risso.

*Vermetus maximus*, n.—*Testâ (juniore adhærente) irregulariter contortâ, subtriangulari, dorso carinatâ, superius erectâ rotundatâ; aperturâ orbiculari; peristomate tenui.*

*Serpula maxima*. Sow. *Tank. Cat. App.* n. 23.

Icon. Animal and Operculum, nat. size. t. 5. f. 3. 3 a. Shell, Wood, *Cat. Append.* p. t. 8. f.

Inhab. Pacific Ocean, with coral, Mr. Stutchbury. Mus. Brit.

Shell when young attached, irregularly twisted, rather triangular, back keeled, the upper part becoming erect, rounded, the mouth orbicular. Peristome thin; operculum orbicular, conical, spiral, many-whorled. The inner part of the cavity is gradually obliterated as the shell elongates, by transverse septa, concave internally.

Several other shells which have erroneously been called *Serpulæ*, and placed with the *Annelides*, appear to belong to this genus; but a good character is still wanting to distinguish them; for the mark left by the muscular attachment of the animal, which would at once separate them, cannot be observed without destroying the specimen.

The body of the animal is long, straight, subcylindrical; the gills are pectinate on the right side, as in the other *Pectinibranchia*; the head is adpressed, bifid in front, and furnished with two short compressed tentacula, with eyes at their outer base; the foot is very short, folded across, two-lobed in front, and offering a large orbicular disk for the attachment of the operculum on the extremity of its hinder part. Dioicous?

Fam. TURBINIDÆ.

Gen. *Delphinula*.

*Delphinula cancellata*, n.—*Testâ depressâ, conicâ, albido-lutescente; anfractibus 4—5, costis 6 spiralibus, numerosisque concentricis, cancellatis; peristomate orbiculari completo, margine tenui, fauce perlaceo.*

Inhab. Arica, Peru, Rev. W. Hennah.

Mus. Brit.

The whorls enlarge rapidly, and are rounded; the cancellation is coarse; the axis conical, deep; and the peristome expanded. The operculum is horny. Axis  $\frac{1}{8}$ , diameter  $\frac{1}{4}$  of an inch.

Fam. NERITIDÆ.

Genus *Cryptostoma* and *Sigaretus* § B. Blainv. (Shell.) *Le Sigaret*, Adanson. *Sigaretus*, Lam.

Foot tongue-shaped, thick, expanded; above cowl-shaped, partly extended over the shell; front prolonged, narrowed beyond the mouth; channelled on each side, and flat and shelving above, separated from the body by a deep cross groove. Body short, spiral. Mouth small, sunk in the cross groove. Tentacula two, compressed, triangular, united by a cross band so as to form a kind of hood. Eyes none? Gills pectinate in a longitudinal series on the left side of the body. Vent on the right angle of the mantle. Dioicous. Orifice of generation near the base of the right tentaculum, female with a callous groove in the middle of the groove on the right side of the front lobe of the foot. Operculum horny, very small, on the right side of the back of the foot under the lower side of the last whorl of the shell.

Shell (sunk in the thick foot) spiral, ear-shaped, spirally striated. Whorls very rapidly enlarging, very oblique. Mouth very large, ovate. Columella lip reflexed. Epidermis thin, membranaceous. Muscular impression extended round the whole of the columella edge.

When alive, the foot (not the mantle, as in most covered shells) entirely hides the shell, and the animals appear to have the power of shortening the front part of the foot so as to draw it into the shell.

The animal of this genus is certainly very nearly allied to *Natica*, which, according to the account of M. Deslonchamp (*Bull.*

*Sci. Nat.* x. 296.) covers the shell when alive. In examining the animal of *Natica ampullacea* of Lam., (preserved in spirits and much contracted,) I find that the front part of the foot is similarly, although in a less degree, extended and grooved on each side: but as both the specimens in the Museum are males, I do not know if the female is furnished with a similar groove. It differs from *Natica* in the small size of the operculum, which escaped the observation of M. Blainville, but which is very distinctly to be seen in both the species I have examined.

1. *Le Sigaret*, Adanson, Seneg. t. 2. f. 2. *Helix Haliotoidea*, Linn. Lister, t. 570. f. 21. *Sigaretus Haliotoideus*, Lam., Blain. *Cryptostoma Leachii*, Blainville, Man. Malac. t. 42. f. 3. Ency. Metrop. t. . . f. . . *Sigaretus Leachii*, Sow. Gen. Shells. f. 3.

Icon. t. 5. f. 1. the operculum. f. 1. a. the details of the head. Africa, Senegal, Adanson. V. M. Mus. Brit.

2. *Sigaretus concavus*, Lam. *Sigaretus Haliotoidea*, Sow. Gen. f. 3.
3. *Sigaretus concavus*, Sow. Gen. f. 1. *Cryptostoma*, t. 5. f. 2. a. the groove on the side of the foot.
4. *Nerita Papilla*. Gmel., Chem. Africa. Capt. Owen.

5. *Cryptostoma Indica*, n. which differs from *C. Haliotoidea* in being a little more convex and solid, and in the edge of the columella being concave and polished. India, Mus. General Hardwicke.

6. *Sigaretus canaliculatus*, DeFrance. Sow. Gen. f. 4.
7. *Sigaretus lævigatus*, and *S. pellucidus*, Deshayes, Coq. Fos. Par. t. 23. f. 5, 6. and 13, 14.

The genus *Sigaretus* of Lamarck should be removed from the *Macrostromes* to near the *Naticæ*; they will then form a natural family, as *Stomatia* and *Stomatella* have animals exactly similar to *Haliotis*. The *Sigaretus* of Cuvier and the *Coriocella* of Blainville, are not only the same genus, but are the same species, as is proved by a specimen sent by Cuvier to the British Museum, which certainly has a greenish shell.

Fam. CERITHIADÆ? Gen. Tornatella.

Animal. *Corpus spirale*. *Pallium integrum submarginatum*, *lateribus contractum*. *Branchiæ pectinatae*. *Tentacula 2 magna*, *supra frontem dilatata*. *Oculi* —? *Pes magnus, latus*, *contractione transversim plicatus*, *antice emarginatus*. *Unisexuale*. *Operculum corneum, acinaciforme, subconcentricum striatum*.

The body is spiral and compressed; the edge of the mantle free all round, slightly thickened in front, and with a slight fold on the right side. The head is surmounted by two very broad, thin, expanded, membranaceous tentacula, forming a kind of hood, and separated from each other by a longitudinal groove; each of them has a slit near the middle of its outer margin, the upper edge of the left being expanded and rounded, while that of the right is rather larger, acute, and folded down. These tentacula bear some resemblance to the double-fringed lips of *Phasianella* (see Cuv. *Moll.* t. 11. f. 2, 3). Head distinct. Eyes —? Mouth sunk-in. Foot short, folded across near the anterior part when the animal is contracted, slightly nicked anteriorly, and rounded behind. The animal is unisexual; the penis exerted, large, situated near the base of the right tentaculum. Branchiæ pectinate. Operculum horny, exactly of the same shape with the mouth of the shell, attached to the upper part of the back of the foot, short, truncate, sickle-shaped, thin and pellucid, formed of somewhat concentric striae; the inner front edge is thickened, and the whole of the inner edge together with the tip, are furnished with a thin membranaceous expansion, which is much broader at the two ends. The use of this thin edge is doubtless to enable the animal to adapt its operculum more exactly to the shape of the mouth of the shell.

It has been observed that shells with toothed columellæ never have opercula; but many instances may be produced to the con-

trary. *Trochus Pharaonis* is not distinguished in this respect from the other shells of that genus; and the genera *Turbinellus*, *Fasciolaria*, and *Pyramidella*, are all furnished with opercula.

The generic name of *Acteon* given by De Montfort to this shell, has been lately applied by Dr. Fleming to the small *Auriculæ*. The present genus has been referred by M. de Ferussac to the same family with the latter, with which it has no affinity whatever. D'Acosta referred it to *Turbo*, Linnæus to *Voluta*, and Bruguière to *Bulinus*.

Fam. MURICIDÆ. Gen. Murex.

*Murex labiosus*, n.—*Testa alba, ovato-fusiformi; anfractibus 5—6, convexis, spiraliter striatis, varicibus elevatis foliaceis 10—11; ultimo anfractu spirâ duplo longiore, costis tribus spiralibus elevatis; labio exteriore expanso albo; fauce rufescente*.

Icon. t. 6. f. 9.

Inhab. Valparaiso, Rev. W. Hennah, Capt. Lord Byron, R.N. Mus. Brit.

Shell ovate, fusiform, white; whorls 5—6, convex, spirally striated, with 10—11 raised foliaceous varices; last whorl twice as long as the spire, with three raised spiral ridges; outer lip expanded, white; throat red brown. Axis  $\frac{3}{4}$ , diameter  $\frac{3}{4}$  of an inch.

Fam. BUCCINIDÆ. Gen. Purpura.

*Purpura Callaoensis*, n.—*Testa ovata, brunnea; spira brevissima conica; anfractibus spiraliter striatis; ultimo subcarinato, pleurumque costis aliis 2 spiralibus obscuris; labio exteriore tenuiter denticulato, margine externo brunneo; fauce albo*.

Icon. t. 6. f. 11.

Inhab. Callao Bay, Rev. W. Hennah. Mus. Brit.

Shell ovate, brownish; spire very short, conical; whorls 4, spirally striated, rapidly enlarging, last slightly keeled, mostly marked with 2 other very obscure spiral ridges; throat white; outer lip finely denticulated; outer edge brown. Axis  $\frac{3}{4}$ , diameter  $\frac{1}{2}$  of an inch.

Fam. VOLUTADÆ. Gen. Mitra.

*MITRA*. Animal: *corpore spirali compresso, latere columellari columellæ sulcis impresso; pede parvo, postice contracto, antice dilatato, truncato; capite cylindrico, brevi; proboscide longissimo, clavato, apice reflexo, disco crassiore; tentaculis brevibus, subcylindricis, compressis; oculis* —?; *pallio tenui; siphone brevi, compresso. Operculum nullum*. Mus. Brit.

The animal of *Mitra*, now, I believe, for the first time described, has the trunk of great length, being often twice as long as the foot. Mr. S. Stutchbury informs me that in *M. Episcopalis* he has frequently seen the animal project it to the distance of five inches.

*Mitra* (species undetermined), South Seas. Animal. t. 6. f. 13.

Fam. APLYSIADÆ. Gen. Aplysia.

*Aplysia Petersonii*, n.—*Corpore postice contracto, transversim in duas portiones profunde diviso; pede postice rugoso, tuberculato*.

Icon. t. 4. f. 4. a. the shell.

Inhab. Marseilles, — Peterson, Esq. Mus. Brit.

Body contracted posteriorly, and divided transversely into two portions. Head very large, depressed, smooth. Foot very broad, deeply emarginate in front, expanded beyond the edge of the body; the part beneath the hinder portion of the body divided by deep wrinkles into distinct tubercles. Mouth sunk-in, large; labial expansions short, triangular, wrinkled. Tentacula situated half way between the head and the transverse contraction, short, conical. Body subglobular, externally tubercular, wrinkled. Lobes of the mantle rounded, united behind, the right one rather longer than the left, partly covering the shield. Shield partly exposed, ovate; nucleus submedial; columellar edge subangularly bent. Length 5 inches, breadth  $2\frac{1}{2}$ .

This species constitutes a peculiar section of the genus, characterized by the transverse contraction of the body. The animal



figured in *Seba*, iii. t. 1. f. 8, 9. (*Aplysia Sebae*, n.) appears to belong to the same section. It differs from the foregoing species in the form of the hinder part of the foot, &c.

## Fam. HELICIDÆ.

Gen. *Bulimus*, Lam.

*Bulimus Peruvianus*, Bruguiere.

Var. Icon. t. 5. f. 4.

This appears to be a variety of Bruguière's species.

*Bulimus Hennahi*, n.—*Testa conica, elongata; anfractibus 6—7 rotundato-convexis, albo-rubentibus, tenuiter transversim rugosis; aperturâ spirâ brevior, ovata; peristomate incrassato; fauce eximie roseo; axi perforatâ.*

Icon. t. 5. f. 5.

Inhab. Plains near Arica, Rev. W. Hennah.

Shell conical, elongate; whorls 6—7, convex, rounded, reddish white, closely transversely wrinkled; mouth shorter than the spire, ovate. Peristome thickened; throat beautiful rose red; axis perforated. Axis  $\frac{3}{8}$ , diam.  $\frac{1}{8}$ . Length of mouth  $\frac{1}{4}$  of an inch.

Gen. *Achatina*.

*Achatina nitens*, n.—*Testa turritâ, nitidâ, pellucidâ, corneâ; spirâ conicâ, apice obtusâ; anfractibus 7—8 gradatim majoribus, convexis; aperturâ quartam testæ partem æquante, ovata; columellâ curvatâ.*

Icon. t. 6. f. 10.

Inhab. —

Mus. Brit.

Shell turritid, shining, pellucid, horn colour; spire conical; apex blunt; whorls 7—8, gradually enlarging, convex. Aperture  $\frac{1}{4}$  the length of the shell, ovate. Columella sharply curved. Axis  $\frac{1}{2}$ , diameter  $\frac{1}{4}$  of an inch.

## Fam. AURICULIDÆ.

Gen. *Auricula*.

*Auricula ovata*, n.—*Testa ovata, elongata, purpurascens; spirâ conicâ, apice obtusâ; anfractibus planiusculis, ultimo spirâ duplo longiore, fasciis pallidis spiralibus 2 vel 4; umbilico marginæ carinato; fauce purpurascens; columellâ plicâ duplici; labio exteriore intus medio incrassato.*

Icon. t. 6. f. 21.

Inhab. South Sea Islands, Mr. Stutchbury.

Mus. Brit.

Shell ovate, elongate, purplish; spire conical; apex obtuse; whorls nearly flat; last twice as long as the spire, with 2 or 4 pale spiral bands; edge of perforation keeled; throat purplish; columella with a double plait; outer lip thickened in the middle of the inner side: The length of the spire varies; axis  $\frac{1}{2}$ , diameter  $\frac{1}{3}$  of an inch.

Subgen. *Chilina*, n.

Shell ovate, thin; aperture large, expanded; columella flattened in front, with an oblique central fold; outer lip thin. Fresh running water.

*Auricula fluctuosa*, n.—*Testa ovata, tenui; spirâ conicâ, aperturâ triplo brevior; anfractibus 5—6 planiusculis, ultimo pallide brunneo, strigis concentricis undulatis fasciisque 4 spiralibus interruptis variegato; columellâ albâ; fauce pallido.*

Otis fluctuosa. Humphreys, Calonne's Cat. lot.

Icon. t. 6. f. 19.

Mus. Brit.

Shell ovate, thin; spire conical,  $\frac{1}{3}$  the length of the mouth; whorls 5—6, nearly flat; last whorl pale brown, variegated with concentric waved streaks, and four interrupted spiral bands; inner lip dark brown; throat pale, showing the colour through; front columella white. Axis  $1\frac{1}{2}$ , diameter  $\frac{1}{8}$  of an inch.

In the Museum there are two varieties, or perhaps species, of this shell; they are neither more than half the size of the above. The first is from Valparaiso, brought by Capt. Lord Byron; this is slenderer, thin, the whorls more convex, and the spire rather longer; the second is from Quiliota, found by Mr. Hennah; it is shorter, solid, and thick, and more obscurely marked. *Auricula Dombeyana*, Lam., and *Voluta fluviatilis*, and *Vol. fluminea*. Maton, Linn. Trans. x. t. 24. f. 13—15, belong to this section of *Auricula*.

## Fam. LYMNEIDÆ.

Gen. *Physa*, Lam.

*Physa Peruviana*, n.—*Testa ovata, spirâ acutâ; anfractibus 5 subito majoribus, convexiusculis; aperturâ spirâ triplo longiore; labio interiore supra ultimum anfractum subreflexo.*

Icon. t. 6. f. 10.

Inhab. Swamps between Lima and Callao, Rev. W. Hennah.

Shell ovate; spire acute; whorls 5, rapidly enlarging, rather convex; mouth  $\frac{3}{4}$  the length of the shell; inner lip slightly reflexed over the last whorl. Axis 1, diameter  $\frac{1}{2}$  an inch. Very like *Bulla rivalis*, Maton; but twice the size, and more ventricose.

## Fam. CHITONIDÆ.

Gen. *Chiton*.

\* *Pallium supra squamis testaceis tectum. Testæ area lateralis distincta.*

1. *Chiton Capensis*, n.—*Testa oblonga, solida, convexa, subcarinata; areâ centrali nigrescenti, obscure longitudinaliter striatâ, laterali olivaceâ, sulcis 5 v. 6 radiantibus utrinque; valvis terminalibus cærulescentibus, nigro radiatim sulcatis; margine lato albo, nigro transversim fasciato.*

Icon. Wood, Suppl. t. 1. f. 11.

Inhab. Cape of Good Hope, Capt. Carmichael.

Mus. Brit.

Shell oblong, solid, convex, subcarinate; end valves blue, radiately grooved with black; lateral area of the central valves olive, with 5 or 6 black radiating grooves on each side; central area blackish, very obscurely longitudinally striated. Margin broad, with moderate-sized oblong scales, white, cross-banded with black. The inside varies green and white. Length  $\frac{3}{4}$ , breadth  $\frac{1}{2}$  an inch.

2. *Chiton glaucus*, n.—*Testa oblonga, convexa, subcarinata, glauca; areâ centrali regulariter longitudinaliter, laterali valvisque terminalibus radiatim, striatis; margine —*

Inhab.

Mus. Brit.

Shell oblong, convex, subcarinate, glaucous green; end valves and lateral area of the middle valves finely radiately grooved; central area finely and regularly longitudinally grooved; laminae of insertion pectinate. Inside white. Margin destroyed.

3. *Chiton textilis*, n.—*Testa oblonga, elongata, albâ, pellucidâ; areâ centrali minute punctatâ, postice longitudinaliter tenuiter striatâ; areâ laterali valvisque terminalibus radiatim striatis et concentricè rugosis; margine albo, minute squamoso.*

Icon. t. 6. f. 20.

Inhab. Cape of Good Hope, Capt. Carmichael.

Mus. Brit.

Shell oblong, elongate, white, pellucid when young, green with a white central band; convex above; end valves and lateral area of the middle valves finely radiately striated, and concentrically wrinkled; central area closely and minutely punctated, and behind finely longitudinally striated; margin white, minutely scaly. Length one inch and half.

4. *Chiton Barnesii*, n.—*Testa oblonga, nigro-brunneo, brunneo et lutescente variegatâ; areâ centrali dense granulose longitudinaliter striatâ; areâ laterali valvisque terminalibus dense granulose radiatim costato-striatis.*

Icon. t. 6. f. 22.

Inhab. Coquimbo, Rev. W. Hennah.

Mus. Brit.

Shell oblong, variegated with blackish brown, brown and yellowish; end valves and lateral area of the middle valves closely and granularly radiately rib-striated; central area finely, closely, and granularly longitudinally striated; mantle broad, greenish-brown, with obscure darker bands, and rather large scales. Length  $\frac{3}{4}$ , breadth  $\frac{1}{2}$  of an inch. Dedicated to Mr. Barnes, an industrious American conchologist, who has well described several species of this genus found in the New World.

5. *Chiton Siculus*, n.—*Testa oblonga, elongata, carinata, lævigatâ, viridi, brunneo-marmoratâ; areâ centrali longitudinaliter, marginali radiatim sulcatâ; margine lato.*

Icon. Wood, Cat. Suppl. t. 1. f. 12.

Inhab. Sicily.

Mus. Brit.

Shell oblong, elongate, strongly keeled, smooth, polished; green varied with brown; end valves and side areas of the middle valves



distantly radiately furrowed; central area of the middle valves deeply but distantly longitudinally grooved. Margin broad, white-green, cross-banded, covered with finely imbricated scales. Length 1 inch, breadth  $\frac{1}{2}$ . Consult Chemnitz, viii. t. 96. f. 815?

6. *Chiton pulchellus*, n.—*Testá oblongá, elongatá, subcarinatá, albido-lutescente; areá centrali punctulatá, laterali costis duobus latis, rugulosis; valvis terminalibus inæqualiter radiatim costatis.*  
Icon. t. 3. f. 9.

Inhab. Arica, Peru, Rev. W. Hennah.

Brit. Mus.

Shell oblong, elongate, slightly keeled, yellowish white; end valves distantly unequally radiately ribbed; lateral area of the middle valves with two broad regular ribs; central area closely and deeply punctured. Margin yellowish white, with very minute bran-like scales. The ribs of the lateral area are rarely bifid. Length  $\frac{3}{4}$ , breadth  $\frac{1}{2}$  of an inch.

7. *Chiton striolatus*, n.—*Testá oblongá, subdepressá, lævigatá, regulariter minute concentrice punctulatá, pallide virescente, viridi vel rufescente punctatá vel marmoratá; margine lato, squamoso, squamis elegantissime striatis.*

Inhab. Rio Janeiro, Rev. W. Hennah.

Mus. Brit.

Shell oblong, rather depressed, polished; pale green dotted or variegated with dark green or reddish; regularly minutely concentrically punctured all over, but more distinctly on the front edge of the lateral area of the middle valves. Margin broad, scaly, white banded with green; scales moderately distinct, beautifully and regularly striated.

\*\* *Pallium supra scabrum, spinulis minutis (squamis longis spinulosis?) tectum.*

8. *Chiton Carmichaelis*, n.—*Testá oblongá convexá, vix carinatá, cærulescente-brunneá, albo-lineatá, lævigatá; valvis anticis costis nodulosis radiantibus, valvarum mediarum areis lateralibus antice posticeque costá simili longitudinali instructis; valvâ posticâ lævi; margine brunneo.*

Icon. Wood, Cat. Supp. t. 1. f. 10.

Inhab. Cape of Good Hope, Capt. Carmichael.

Mus. Brit.

Shell oblong, convex, scarcely keeled, smooth, bluish brown streaked and lined with white; front valves with distant rather broad radiating nodulose ribs; front and back margins of the lateral area of the middle valves with a single similar rib; hinder valve smooth; margin scabrous, brown. Length  $\frac{1}{2}$  an inch, breadth  $\frac{1}{3}$ .

9. *Chiton Janeirensis*, n.—*Testá oblongá, elongatá, albido-brunneá; areá centrali medio profunde punctatá, lateribus dense longitudinaliter punctato-sulcatis; areis lateralibus costis 4 convexis nodulosis, valvis terminalibus costis similibus radiantibus instructis.*

Icon. t. 6. f. 8.

Inhab. Rio Janeiro, Rev. W. Hennah.

Mus. Brit.

Var.? *Costis valvarum terminalium paucis majoribus, arearum lateralium 2 tantum.*

Inhab. Valparaiso, Rev. W. Hennah.

Mus. Brit.

Shell oblong, elongate, brownish white; end valves with convex nodulose radiating ribs; lateral area of the middle valves with 4 similar ribs of unequal length; central area deeply punctated in the middle, and closely longitudinally punctately grooved on the sides. Length  $\frac{3}{4}$ , breadth  $\frac{1}{2}$  of an inch.

The variety (probably a distinct species) differs in the ribs of the end valves being stronger and fewer in number, while those of the lateral area are reduced to two, which are very broad.

\*\*\* *Pallium cartilagineum, spinis capillaribus sparsis tectum.*

10. *Chiton spinulosus*, n.—*Testá oblongá, convexá, purpureo-rufescente; areá centrali costis distantibus articulatis; valvis terminalibus areisque lateralibus costis obscuris distantibus radiantibus, tuberculisque mammillaribus sparsis, instructis.*

Icon. t. 6. f. 7. 7 a.

Inhab. Rio Janeiro, Rev. W. Hennah. Mus. Rev. G. Hennah.

Shell oblong, convex, reddish-purple; end valves, and lateral area of the middle valves with distant obscure raised radiating ribs and scattered mammillary tubercles; central area with distant raised finely and regularly beaded ribs; margin cartilaginous, with numerous scattered hairlike spines. Length  $\frac{3}{4}$ , breadth  $\frac{1}{2}$  of an inch.

11. *Chiton Hennahi*, n.—*Testá oblongá, subdepressá, minutissime punctulatá, purpurascens albido-variegatá; areá centrali striis longitudinalibus tenuissimis, minute et sparsim tuberculatis, tuberculis albis; valvis terminalibus areisque lateralibus striis similibus radiantibus; margine brunneo, spinis brevibus castaneis.*

Icon.

Inhab. Callao Bay, Rev. W. Hennah.

Mus. Brit.

Shell oblong, rather depressed, purplish varied with white, very minutely punctured; end valves and lateral area with obscure, very fine, minutely and distantly tubercular, radiating striae, tubercles white; central area similarly longitudinally striate; margin brown, with scattered short bay hairs. Length  $1\frac{3}{4}$ , breadth  $\frac{1}{4}$  inch.

I may here observe, that *Chiton striatus* of Barnes has been called *C. magnificus* by Deshayes, and *C. olivaceus* by Frembly.

*Ch. Peruvianus* of Barnes is *C. hirsutus* of Deshayes.

*Ch. aculeatus* Barnes, is *Ch. Sowerbii* of Deshayes.

*Ch. niger* of Barnes, is *Ch. Coquimbensis* of Frembly.

Several of Frembly's species have been before figured, as *C. lineatus*, Ency. Meth. t. 162. f. 1, 2. *Ch. Cummingii*, Ency. Meth. t. 162. f. 3, 4.

Fam. MYIDÆ.

Gen. *Anatina*.

- A. *cuneata*, n.—*Testá solidá, irregulari, subæquivalvi, oblongo-cuneatá, antice subtruncatá, rotundatá, postice productá, irregulariter concentrice rugosá, intus perlacéá; umbonibus anterioribus; cardine subdentulo; dente cardinali mobili magno, oblongo.*

Icon. t. 3. f. 14.

Inhab. Arica, Peru; on Alcyonia.

Mus. Brit.

The periostraca is hard, greenish, and extended beyond the margin of the shell. Length  $1\frac{1}{2}$ , height  $\frac{3}{4}$  of an inch.

*Pandora brevis* of Sowerby (App. to Stutchbury's Sale Catalogue) should be referred to this genus, as it possesses the moveable piece in the hinge, which is the character of the genus.

Fam. MACTRIDÆ.

Gen. *Amphidesma*.

- Amphidesma solida*, n.—*Testá crassá, solidá, suborbiculatá, albá, concentrice sulcatá, tenuissime radiatim striatá, postice subrugosá; margine cardinali purpureo; lunulá minimá, lanceolatá; dentibus cardinalibus tenuissimis.*

Icon. t. 6. f. 6. 6 a.

Inhab. Arica, Peru, Rev. W. Hennah.

Mus. Brit.

Like the rest of the genus, this species only differs from *Tellina* by the ligament being internal; it has much the external shape of *Tellina fausta*. Length  $2\frac{1}{2}$  inches, height  $2\frac{1}{2}$ .

Fam. VENERIDÆ.

Gen. *Glaucanome*.

- Glaucanome*, n.—*Testa equivalvis; umbones subanteriores; periostraca tenuis dura. Dentes cardinales tres in utroque valvâ, laterales nulli. Impressio siphonalis longissima.*

Shell ovate, equivalve, inequilateral, slightly gaping behind; umbones prominent, subanterior; periostraca thin, hard; cartilage external, marginal, short; fulcrum moderate. Hinge teeth 3 in each valve, small, diverging; the posterior long, oblique, bifid; the 2 anterior short. Lateral teeth none. Siphonal impression very long, narrow; front muscular. Fresh water.

- Glaucanome Chinensis*, n.—*Testá ovato-oblongá, antice rotundatá, postice productá, attenuatá, albá, concentrice striatá; periostracâ pallide viridi.*

Icon. t. 3. f. 13. 13 a, the hinge.

Inhab. China, Mrs. Mawe.

Mus. nost.

I am indebted to the above-mentioned lady for two specimens of this curious shell, which exhibits such striking and well-marked distinctive characters. The posterior dorsal edge is oblique; the dorsal margin rounded; the basal edge nearly straight; and the epidermis wrinkled. The latter is pale green; the colour of the shell itself white. Length  $1\frac{1}{2}$  inch, height  $\frac{3}{4}$ .

Fam. SOLENIDÆ. Gen. Solen.

Solen (Solonocurtus) solidus, n.—*Testâ solidâ, ovato-oblongâ, albâ, obsolete concentricè rugosâ; umbonibus convexis subanterioribus; margine dorsali postico sinuato; dentibus cardinalibus in utraque valvâ 2, altis, brevibus, antico recto subbifido, altero obliquo.*

Icon. t. 3. f. 12.

Inhab. Arica, Peru.

Mus. Brit.

Length of the shell  $2\frac{1}{2}$  inches, height  $1\frac{3}{4}$ ; the most solid and shortest shell in the genus.

Fam. UNIONIDÆ. Gen. Unio.

Unio Chilensis, n.—*Testâ ovato-oblongâ, tenui, pellucidâ, albidovirescente, intus albedo-ceruleâ; umbonibus decorticatis; epidermide nigro-brunneo.*

Icon. t. 6. f. 12.

Inhab.

Mus. Brit.

Shell ovate-oblong, thin, pellucid, greenish white, internally bluish. Epidermis black-brown; umbones scarcely raised, corroded; the hinge margin slightly rounded; behind truncated; the posterior basal edge slightly produced, rounded; the anterior basal edge obliquely rounded; the valves rather convex, regularly concentrically wrinkled. The hinge teeth compressed, simple; apex crenated; the hinder lateral teeth distinct, elevated. Length 3, height  $1\frac{7}{8}$  of an inch; breadth  $\frac{7}{8}$ ; and var.  $\beta$ . breadth  $\frac{3}{4}$  of an inch.

Fam. MYTILIDÆ. Gen. Modiola, Lam.

Modiola elegans, n.—*Testâ tenui, gracili, pellucidâ, pallide viridi; antice attenuatâ rotundatâ, postice dilatatâ; margine cardinali recto; areâ dorsali posticâ tenuiter radiatâ, transversimque purpureo undatâ; reliquâ parte lævi.*

Icon. t. 6. f. 14.

Inhab. Coast of Africa, Capt. W. F. Owen, R.N. India? Mus. Brit.

Shell slender, thin, pellucid, pale green; before attenuated, rounded, behind dilated; hinge margin straight; the posterior dorsal part finely radiated, and transversely waved with purple; rest of the shell smooth. Length 1 inch and a half.

## CIRRHIPEDA.

Fam. POLLICIPEDIDÆ. Gen. Smilium.

SMILIUM, n. (Ann. Phil. 1825).—*Laminæ testaceæ 13; quarum paria 5 laterales, subtriangulares; anteriores 2, dorsalis ventralisque triangulares, incurvæ; posterior dorsalis linearis, geniculatus; omnes glabræ. Pedunculus pilosus.*

S. Peronii, n. Ann. Phil. 1825.

Icon. t. 3. f. 11.

Inhab.

Mus. Brit.

IBLA n. l. c.—*Laminæ testaceæ 4; posteriores elongatæ, parum curvatæ; anteriores triangulares, breves. Pedunculus cylindricus, basi contractus, pilosus.*

Ibla Cuvierana, n.—*Laminis transversim annulatis, deorsum spectantibus.*

Icon. t. 3. f. 10. 10 a.

Inhab. Kangaroo Island, Peron.

Mus. Brit.

CONCHOTRYA, n. l. c.—*Laminæ testaceæ 5; quarum paria duo ventrales; unica dorsalis. Pedunculus —?*

C. Valentiana, n. l. c.

Inhab. Holes in shells. Red Sea, Lord Valentia. Mus. Brit.

BRISMÆUS, n. l. c.—*Laminæ testaceæ 7; quarum paria 3 laterales; unica dorsalis. Corpus cylindrico-conicum. Pedunculus —?*

B. rhodiopus, n. l. c.

Icon. t. 6. f. 17.

Inhab. Holes in corals.

Mus. Brit.

Fam. ANATIFERIDÆ. Gen. Octolasmis.

OCTOLASMIS, n. l. c.—*Laminæ testaceæ 8, parvæ; quarum paria 3 laterales; par unicum dorsales; lamina posterior ovato-linearis, ventralem linearem in crenâ excipiens; lateralis intermedius triangularis; dorsales juncturâ angulum centalem formantes. Corpus subcompressum.*

O. Warwickii, n. l. c.

Icon. t. 6. f. 16.

Inhab.

Mus. Brit.

## INSECTA.

Fam. GALLINSECTA, Latr. Gen. Coccus.

Subgen. CEROPLASTES, n.—*Mas. Coccis similis? Fœm. inflata, cerifera, pellucida, laminis 7 tecta, paribus 2 lateralibus, unicâ centrali dorsali, 1 anteriori, aliâ denique posteriori; laminarum marginalium nucleo infero submarginali, dorsalis subcentrali.*

The seven plates of which the covering of the female is composed, are arranged in two lateral pairs, and a central series consisting of an anterior, a dorsal, and a posterior plate; the nucleus of the six marginal plates is close to the lower edge, that of the dorsal one nearly central.

In the *Phil. Trans.* for 1794, vol. lxxxiv. Dr. George Pearson has described an insect which is doubtless related to this group, and which had been sent him from India by Dr. Anderson, under the name of *White Lac*. I have not been able to examine that insect; but it is evident from the description that it must be a distinct species from those which I am about to notice. It is found on the *Celastrus ceriferus*; and is inserted by Fabricius in his *Ent. Suppl.* p. 546, under the name of *Coccus ceriferus*.

1. Coccus (Ceroplastes) Chilensis, n.—*Major, albus, pellucidus; laminis subæqualibus, dorsali planiusculâ.*

Icon. t. 3. f. 7.

Inhab. Chili, on the branches and peduncles of a tree with pinnated leaves. Genus unknown.

2. Coccus (Ceroplastes) Janeirensis, n.—*Minor, brunneus, subopacus, hemisphæricus; laminâ dorsali convexâ.*

Icon. t. 3. f. 6.

Inhab. Brazil, on a species of Solanum, with simple lanceolate velvety leaves.

Both these species were found by Mrs. Graham during her residence in the Brazils and Chili; and I believe that they have been mentioned as well by that lady as by M. Von Humboldt in their respective works; but as neither are provided with indexes, I am unable to refer to them for the particulars. D'Azara, in his *Voy. Amer. Merid.* p. 164, mentions that such animals are found on a shrub of 2 or 3 feet in height, called Quabirumy. Consult Kirby and Spence's *Introd. to Entom.* i. 321, and perhaps also Molina's *Chili*, i. 174.

## CRUSTACEA.

Fam. NEBALIADÆ. (Les Schizopodes, Latr.)

Subgen. CERATASPIS, n.—*Thorax maximus, tuberculatus, animal contractum omnino includens; abdomen articulis 7, ultimis 2 longis, reliquis annularibus; ultimo paribus 2 pinnarum caudalium; pedes 12 v. 14 longi, graciles, ciliati, appendiculati; antennæ longissimæ, setaceæ; oculi magni, pedicellati, approximati.*

*C. monstrosus*, n.—*Brunneus*; *thorace subdepresso*; *antice truncato*; *5-cornuto*; *cauda corpus subæquante*.

Icon. t. 6. f. 5. 5 a, front of head. 5 b, one of the legs.

Inhab. Found in the stomach of a dolphin off the coast of Brazil.  
Mus. Brit.

The horns of the thorax are five in number, one extending forwards between the eyes, two projecting perpendicularly over them, and the remaining two directed downwards on the outside of them; the forehead is longitudinally keeled; the middle of the back largely tubercular, and the sides, which are very convex, covered with 6 or 7 raised tubercular ridges; the hinder end of the thorax is extended and rounded laterally, and emarginate in the middle. Each of the false legs is furnished with a long, slender, ciliated appendix. The length of this singularly monstrous and mis-shapen animal, is  $\frac{7}{8}$ ; its breadth across the broadest part of the thorax  $\frac{3}{4}$  of an inch.

## RADIATA.

Fam. SIPHUNCULIDÆ. Gen. *Siphunculus*, Martin.  
(*Sipunculus*, Linn.—*Sipunculus*, Cuv.)

1. *SIPHUNCULUS*.—*Corpus cylindraceum, lumbricoide. Anus ventralis, prope basin proboscidis. Proboscis retractilis. Os serie tentaculorum parvorum. Maxillæ nullæ.*

1. *Siphunculus nudus*.—*Corpore subcylindrico, lævi; proboscide tertiam partem corporis æquante, subcylindrico, lævi, prope os subincrassato, seriebus 5 v. 6 spinarum brevissimarum.*

*S. nudus*, Linn.? Mont. Pennant, *Brit. Zool. t.*

Inhab.

Mus. Brit.

The body is slightly enlarged at each end, and finely transversely wrinkled; it is rounded at the base. Length of the body  $2\frac{1}{2}$  inches, of the trunk  $\frac{3}{4}$ .

2. *Siphunculus Strombus*.—*Corpore cylindrico, spiraliter torto; infra anum tuberculatim rugoso; tuberculis minutis, spinulosis, brunneis; proboscide corpore longiore, gracili, cylindrico.*

*S. Strombus*, Mont. Linn. Trans. vii. p.

*S. clavatus*, Blainv. *Dict. Sci. Nat.?*

Icon. t. 6. f. 1.

Inhab. Coast of Devonshire, in *Strombus Pes Pelecani* and *Turritella cornea*.

Mus. Brit.

The minute tubercles which are scattered over the surface of the body just below the vent, become more and more rare as they approach the base, which is rounded; the vent is papillary; and the trunk slightly enlarged at the base. Length 4 inches.

3. *Siphunculus Dentalii*, n.—*Corpore fusiformi, lævi, infra tuberculis sparsis spinulosis, prope anum tuberculatim subrugoso; proboscide longitudine corporis, subcylindrico, apice dilatato, globoso.*

Inhab. Coast of Yorkshire, in *Dentalium Entalis*, W. Clift, Esq.

Mus. Brit.

The base of the body is rounded; and the trunk very minutely spinulose. Length  $\frac{3}{4}$ , breadth  $\frac{1}{4}$ ; length of the trunk  $\frac{1}{2}$  of an inch.

4. *Siphunculus tuberculatus*, n.—*Corpore subcylindrico, postice attenuato, tuberculis mamillaribus, versus utramque extremitatem majoribus, tecto; proboscide tertiam partem corporis partem æquante, cylindrico.*

Inhab.

Mus. Brit.

The body is conical and attenuated behind; the trunk tubercular at the base, and nearly smooth at the apex. Length of the body  $1\frac{1}{2}$  inch, its breadth  $\frac{1}{4}$ ; length of the trunk  $\frac{1}{2}$ .

5. *Siphunculus arcuatus*, n.—*Corpore fusiformi, apice brevi conico, basi cylindrico longiore clavato, tuberculis magnis sparsis tecto; proboscide longissimo, cylindrico, apice brevissime fimbriato.*

Inhab. India, Gen. Hardwicke.

Mus. Hardw.

British Museum,  
July 1, 1828.

The cylindrical base of the contracted body is two-thirds of the whole length; it is rounded and convex at the extremity; the cartilaginous tunic is covered with numerous annular wrinkles, and with scattered conical tubercles which become larger towards the two extremities. The siphon is spirally twisted when in a state of contraction. Length 4 inches, breadth  $\frac{1}{2}$ . Siphon 8 inches.

II. *THEMISTE*, n.—*Corpus cylindraceum, lumbricoide. Anus ventralis, prope basin proboscidis. Proboscis retractilis. Os branchiis 5 subæqualibus, dichotomis, tenuissime divis, circumdatum. Maxillæ nullæ.*

1. *Themiste Hennahi*, n.

Icon. t. 6. f. 4. 4 a, the head and gills.

Inhab. Peru, Rev. Mr. Hennah.

Mus. Brit.

This genus appears to be intermediate between *Holothuria* and *Siphunculus*; in internal organization it agrees with the latter. The branchiæ, which are cartilaginous at the base, are repeatedly forked; the ends of the lobes are finely fringed, and of a purple colour.

Fam. ACTINIADÆ.

Gen. *Isaurus*.

*ISAURUS*, n. (*Les Isaures*, Savigny MSS.)—*Animalia nuda, libera vel adherentia (?) carnosa, cylindrica; os terminale, circulare, velo cylindrico, longitudinaliter sulcato circumdatum; velum margine interno seriem duplicem tentaculorum ferens; tentacula alterna longiora; stomachus longitudinaliter plicatus.*

Of this genus, indicated in the plates to the magnificent *Description de l'Egypte*, M. Savigny has published neither characters nor description. The name which is there given, *Les Isaures*, has been Latinized, also without characters, by M. Lamouroux, who has called it *Isaura*. As, however, the latter name is already appropriated to a genus of plants, and the termination is in itself of little importance, I have ventured to change it to *Isaurus*.

In the fully expanded animal (see t. 6. f. 3, copied from Savigny, *Polypes d'Egypte*, t. 2. f. 34.) the veil which surrounds the mouth is reflected for some distance over the extremity of the body: when contracted, on the contrary, as in t. 6. f. 2 a, it is inflected in such a manner as completely to cover the tentacula and its own base. The longitudinal plaits of the stomach are strongly marked, and divide that organ to a certain extent into numerous cells.

*Isaurus tuberculatus*, n.—*Gregarius, subcylindricus, curvatus, longitudinaliter et transversim sulcatus, tuberculatus; tentaculis acutis.*

Icon. t. 6. f. 2, external appearance; f. 2 a, a longitudinal; and f. 2 b, an imaginary transverse section, showing the folds of the stomach.

Inhab.

Mus. Brit.

Length 2 inches, diameter  $\frac{1}{2}$  an inch.

In the plate above referred to, M. Savigny has figured, but not described, four species of this genus. Of these the first is free, *I. natans*, n. Sav. l. c. t. 2. f. 1: the three others attached, *I. Savignii*, n. l. c. t. 2. f. 2; *I. aggregatus*, n. l. c. t. 2. f. 3, partly copied in my t. 6. f. 2; and *I. clavatus*, n. l. c. t. 2. f. 4. They all differ from the animal above described in being entirely smooth, and from each other in the shape of their tentacula.

Fam. FLUSTRIDÆ?

Gen. *Lunulites*, Lam.

*Lunulites Owenii*, n.—*Suborbiculata, margine denticulata; supra convexa, clathrato-porosissima; infra concava, radiatim substriata, centro rugosa.*

Icon. t. 3. f. 15. 15 a, base; 15 b, magnified.

Inhab. Coast of Africa, Capt. W. Owen, R.N.

The first recent species described. It is most like *L. radiata*, Lam., but larger and more porous. Like it, it is attached to small shells by the centre of its base. It was found in company with a new and recent species of *Orbulites*, *O. Africana*, n. resembling *O. complanata*, Lam.



## Fam. FELIDÆ.

Gen. *Viverra*.

*Viverra undulata*, n. (Waved Civet.)—*Vellere undatim nigro alboque varia, subtus flavescens albida, linea dorsali fusca, gutture lineis duabus curvatis nigris, cauda albido-nigroque annulata.*

Icon. t. 8.

*Felis Nepalensis*, F. Cuv. *Mamm. Lithog.*??

Hab. in Nepal. v. Mus. Brit.

Fur close, with a lead-coloured woolly under fur, the back, back of the neck, shoulders, and outside of hind legs whitish grey, with narrow wavy black cross lines; the back with a distinct crest of rather long pure black hair, commencing just between the bladebones, and becoming wider and distinctly edged with white as it reaches the tail. The throat yellowish, with two black curved lines on each side, the anterior one much the broadest, the hinder one edging the dark part of the neck; the sides and under part of the body and inner part of the limbs are pale brown grey with rather darker waves. The tail half the length of the body (perhaps injured) yellowish white, with four broad black brown rings, and a whitish tip. The head and feet wanting to the skin. Length of body 20, of tail 9 inches.

This animal greatly resembles the *Felis Nepalensis* of M. F. Cuvier, who gives no account of where and by whom it was taken; so that probably his figure was taken from a drawing sent from India, and may prove to be a *Viverra*.

*Viverra maculata*, n. (Square Spotted Genet.)—*Canescens, fusco maculata, maculis dorsalibus longe quadratis in 6 series longitudinales dispositis, lateralibus subrotundis sparsis, cauda nigro alboque annulata, apice saturate fusca.* Icon. t. 9.

Hab. in Africa Boreali. v. v. Tower of London.

Grey brown, with a brown streak down the back, commencing narrow just between the bladebones and widening as it reaches the tail, slightly erectile like a crest, with three interrupted narrow streaks on the back of the neck, reaching over the shoulder, and extending along the sides of the back in three series of spots, the spots of the two higher series square, those of the highest series the largest and nearer together, of the lower series roundish; the sides of the belly with scattered black brown spots; shoulder and hind legs with moderate roundish black spots; beneath pale whitish, with a few scattered small dark spots. Head grey brown, with a dark rough place on each side the nose and a small one on the inner angle of the eyebrow, a long white spot before the eye, and six small blackish spots between the ears, in front of the face, placed in two groups of three each. Tail reaching to the ears, rather furry, triangular, broader beneath, with seven black bands, increasing in breadth towards the end. Feet black brown.

This animal has been for some time alive in the Menagerie at the Tower. It has an exceedingly strong musky smell, and is continually placing its two hind legs against the wall of its cage, and pressing the subanal glands against it, leaving two chocolate brown musky streaks. The common Civet in the same collection is constantly performing the same operation, but the streaks of the Genet are far larger, as if more musky secretion was emitted at each action.

*Viverra Hardwickii*, n. (Hardwicke's Genet.) *Aurantio fulva, facie lineae longitudinali, dorso fasciis lunatis transversis nigris ornata, cauda nigro annulata.*

Hab. in India, Malacca. Major Farquhar.

It is pale orange fulvous, rather paler beneath; the end of the nose black, with a black streak on each side bending over the ears, which are short and rounded, and inclosing the eyes; the neck has three small and the back six broader somewhat lunate black bands extending half way down the sides; the tail reaches to the shoulders, with six or seven blackish rings, the first one broad, the last the broadest, occupying about  $\frac{1}{4}$  the length of the tail, and separated from the next by a brown band. The animal is only

PART II.]

known by the drawing of Major Farquhar, which is now in the collection of the Asiatic Society; he was the first discoverer of the *Indian Tapir*, the *Gymnura*, and many other Indian animals.

These animals are all to be found in his collection of drawings, and though not very beautifully are faithfully drawn, so that there appear good grounds to place faith in the species.

In the drawing, which may not be of the natural size, the length of the head is 2 inches; the neck and body 6; and the tail 4; the animal stands  $2\frac{1}{2}$  high at the shoulders.

*Viverra larvata*, (Masked Genet.)—*Grisea, facie pedibus caudæque apice nigris, facie fasciis maculisque albis variegata.*

*Viverra larvata*, Temm. *Mus. Leyd.*

*Gulo larvatus*, Major Smith, *Griffith's Anim. Kingd.*

Icon, *Griffith's Anim. Kingd.* t.

Inhab. China, J. Reeves, Esq. v. Mus. Leyd.

Grey, face and hind feet black, fore feet and end of tail blackish, the face with a streak down the centre, and a spot on and another behind the eye white. The body about 24 inches and the tail about 18 inches.

By the Chinese drawings which Mr. Reeves has been so kind as to lend me, the size of the form of the white spots appears to vary considerably. In both the white central band extends from the forehead down to the end of the nose; but in one there is a band across the forehead, a dash over the eyes, and the whole of the cheeks and side of the head are white, while in the other there is a white spot at the base of the ear, another just under the eyes, and a small white collar round the under part of the neck.

*Viverra binotata*, (2-spotted Civet.)—*Grisea, maculis inequalibus nigris sparsis, humero macula alba notato, cauda corpore longiore maculis annulisque nigris ornata.*

*Viverra binotata*, Tem. *MS. Mus. Leyd.*

Inhab. Africa, Ashantee.

v. Mus. Leyd.

Grey, with scattered black spots of unequal size, and two white spots on the top of the shoulders; tail longer than the body, spotted and ringed with black.

*Hyæna striata*.

Gen. *Hyæna*.

Var.  $\beta$  Capensis.

*Hyæna villosa*, Smith, *Linn. Trans.*

Inhab. Cape of Good Hope. v. v. Hort. Zool.

This animal is certainly only a variety of the common Striped Hyæna, as may be seen by comparing the specimens of the two placed close together in the Gardens of the Zoological Society; it only differs from those found in the northern part of Africa by its fur being longer and more bristly, so that it has a longer mane, as in the variety figured by Bruce in his Travels.

*Felis Chaus* (Bengalore Cat.)

Gen. *Felis*.

Icon. t. 7, f. 2.

*Guldenst. Nov. Com. Petr. xx. t. 14. cop. Schreb. Saugth. t. 110*

B. and Ency. Method. t. 97. f. 1.

*Cretzschmar, Rupp. Zool. Atlas, t. 4. f. 9.*

*F. Cuv. Mamm. Lithog. t.*

Hab. in Africa Septentrionali. Egypt, *Ruppel*, Asia, Persia, *Guldenst.* India, *Dr. Hamilton*, fide Icon. Mus. Ind.

When this Cat was drawn on the stone, 1829, it was the only modern figure of the animal then done, but since that time Dr. Ruppel and M. F. Cuvier have published excellent figures of the species, and I would have suppressed this plate if it had not been associated with the *Chinchilla*. The animal here figured was presented by the Duke of York to Mr. Cross's Menagerie at Exeter Change, where it is called the *Wild Cat from Bengalore*.

B

[Price 4s. 6d.]

The fur is a light greenish brown, slightly banded on the sides of the limbs, some obscure darker bands between the ears, and another from the angle of the eyes; beneath paler, with a brown crescent on the front of the chest; throat nearly white; ears rounded, tips black on the outside; fore legs with two black bands on their inner and upper part; tail half as long as the body, with three black rings near the end, and a black tip.

According to Dr. Hamilton it is called in Bengalee *Vana virala*, and in Hindustanee *Bana bilava*.

## Fam. URSIDÆ.

Gen. *Ursus*.

*Ursus Americanus*.

Var.  $\beta$  castaneus, nob. Pallide fuscus.

Cinnamon Bear, Canton, Icon. t.

Inhab. America.

v. v. Menag. Zool. et Regal.

The various specimens of this species greatly vary in colour from yellowish white to dark black, brown, and all the intermediate shades between them.

## Fam. DIDELPHIDÆ.

Gen. *Phalangista*.

*Phalangista gliriformis*, Bell. Lin. Trans. xvi.

*Phalangista nana*, Geoff. Ann. Mus.

Having lately had the opportunity of examining a fine skin of this animal sent to Gen. Hardwicke from Van Diemen's Land, and comparing it with a skin given to the Museum by Mr. Morgan, I am inclined to think that the *Phalangista nana* will prove to be the young, as the ears of both skins are covered with short, rigid, scattered, adpressed hairs.

Gen. *Macropus*.

*Macropus albus*, n. (White Kangaroo).—*Vellere unicolore albido flavida, auriculis elongatis ovatis acutis, cauda abbreviata incrassata*.

Inhab.?

Mus. Brit.

The fur soft, thick, and rather woolly, dirty yellow white. The soles of hind feet bald, black. The ears rather long, reaching rather beyond the front of the eyes, ovate, acute; the outer side, the edge, and upper half of the inner side covered with rather long scattered white hairs; the tail thick and short, not reaching to the shoulders, the end perhaps destroyed.

This animal is only provisionally described as a species, as there is only a single specimen of it in the British Museum, without any skull. It may probably prove only an albino variety of some other species, though I am not acquainted with any species as yet described that has such long ears, and so short and thick a tail; but both these characters may depend upon the manner in which it is stuffed; for the skin, before it was stuffed, appears to have been used as a cloak, or mat.

The length of the head 7 inches; of the ears from outer base to tip 3; of the neck and body 25; of the tail 15; of the fore feet with bones in them 3; of the hind feet with bones in them, to the end of the middle toes  $8\frac{1}{2}$ ; and to the end of the outer little toe 7.

## Fam. SCIURIDÆ.

Gen. *Gerbillus*.

*Gerbillus Afra*, n.—*Pilis mollibus supra pallide castaneis vellere plumbeo, infra mentoque albis, capite acuto, cauda longitudine corporis*.

*Mus sericeus*, Temm. MSS. v. sp. *Mus. Leyd.*

Inhab. Cape of Good Hope.

Mus. Brit.

Fur soft above, pale bay, with scattered long black hairs; down lead coloured; outer face of the limbs and sides pale brown; chin and beneath pure white; tail as long as the body, covered with scattered rigid adpressed hairs, with a dark brown central line, end slightly penicillated; whiskers very long, black and white; ears large, rather naked; cutting teeth yellow, upper ones grooved in front, teeth like

*G. Indicus*. Body 6 inches; tail 5; whiskers 2; and ears  $\frac{3}{4}$  of an inch; called *Dane Rat* at the Cape.

*Gerbillus Indicus* is *Mus Indicus* of Dr. Hamilton's MSS.; it is called *Mus Indicus* of Geoffroy in the Leyden Museum. Geoffroy's specimen in the French Museum appears to be the true *Mus*, as it has a scaly tail. In the Paris Museum there is an unnamed species, apparently of this genus, which is much darker than *G. Indicus* and variegated.

## Fam. MURIDÆ.

Gen. *Heteromys*, Desm.

*Rostrum acutum, sacculi buccales interne pilosi. Dentes primores superiores longi. Molares simpliciter radicati coronis obductis, tritorii. Corpus setosum, supra spinis elongatis anguste lanceolatis inter seta mixtis. Pedes ambulatorii digitis 5, 5.*

Head conical, mouth very small, ears naked and rounded, cheek pouches external, very large, internally hairy, cutting teeth  $\frac{3}{2}$ , lower rounded, upper placed out of the mouth, smooth and flat in front, canines 0, grinders  $\frac{1}{4}$ , simple rooted, subequal, the front rather the largest, crown with two suboval rings of enamel, the others deeply lobed on one side as if formed of two plates, the front edge of the hinder ring of the front grinder of the upper jaw sinuous, the others deeply lobed on the outer edge as if formed of two parallel plates, united by a double raised rim on the inner edge of the upper and the outer edge of the lower jaw; in the centre of the disk of the front ring of the anterior tooth of the lower jaw is a raised central ring; roots three simple straight. The feet with six callous tubercles beneath. Toes 5, 5, armed with sharp claws. Thumbs very short and small. The tail, long, cylindrical, scaly, with scattered bristle like hairs.

This genus is most nearly allied to the genus *Sacomys* (F. Carr. Mem. Mus. t.) but it differs in the form of its grinders, (*Dent. Mamm. t. 74.*): it has been placed with the *Hamsters* on account of its cheek pouches by Desmarest, and with the *Echimyids*, on account of its ears by Kuhl; but it differs from the latter in many characters.

When in their original state the grinders are doubtless each furnished with transverse tubercles, with arcs united together on the inner or outer edge by a similar raised band, but when they are worn flat they have the appearance here described.

The body is covered on the upper part with fine lanceolate keeled spines, and beneath with coarse bristly hair intermixed with a finer under fur. The cheek pouches are very large, extending from the base of the upper teeth to the throat.

*Heteromys anomalus*, n. (Anomalous Pouch Rat.)

*Mus anomalus*, Thompson, Lin. Trans. xi. 161 t. 10.

*Cricetus anomalus*, Desm. Mamm. 313.

*Heteromys Thompsonii*, Less. Mamm. 264.

*Loncheres anomala*, Kuhl. Beitr. 72?

—— myosurus, Licht. Abh. Berl. Acad. 1818, t. 1. f. 23.

*Mus leptosoma*, Licht. Brant's Muiz. 150. Fischer 326.

Hab. in Trinidad, Thompson, (v. spec. mutilat. D. Thompson, in Mus. Brit.)

The generic character has been taken from the skull and part of the skin of the animal figured by Mr. Thompson, which is now in the British Museum.

## Fam. ARVICOLIDÆ.

Gen. *Ctenodactylus*.

*CTENODACTYLUS*.—*Podii omnibus digitis 4, et verruca hallucari obsoleta, unguibus parvulis falcatis, digitis interne cum appendiculis osseis pectinatis. Cauda brevissima pilosa.*

This subgenus appears to be most nearly allied to the Lemmings, (*Lemmus*), with which it agrees in teeth and form, but it differs from them in only having four free toes on each of the feet, and a very obscure clawless wart in the place of the thumb, and in the claws of all the feet being short and incurved, those of the hinder



ones being covered with a tuft of rigid hair, more especially to be distinguished in the two inner toes, each of which also has a double, small, deeply pectinated bony plate on its inner side. The tail is very short, scarcely longer than the fur of the back, covered with long bristly hair. The cutting teeth incurved, the lower rounded in front, the upper concavely truncated; the grinders  $\frac{1}{3}$ , the upper,  $\frac{1}{2}$  (probably like the lower), the lower laminar, crown two-lobed; the anterior lobe transverse, narrow, round on the outer, and narrow and sharp on the inner side; the hinder lobed, larger, and rounded, the lobe of the two anterior ones being rather wider than long, and of the last as long as wide.

*Ctenodactylus Massonii*, n. (Masson's Comb Rat.)

*Corpore pallide fulvo, subtus albedo, pilis basi plumbeis apice nigricantibus, auriculis externe pilis densis tectis velleris longitudinis, mystacibus longissimis atris.*

Icon. t. 10.

Hab. ad Cap. Bon. Spei. M. F. Masson, 1774. v. m. Mus. Brit. v. v. Hort. Soc. Zool.

The fur soft, silky, the upper parts pale fulvous brown, the hair very thin, pale lead coloured at the base, pale fulvous at the end, with very short blackish tips, especially on the head; the chin, throat, inner side of limbs, and beneath whitish, with the same lead coloured base to the hairs. The head rather small, and densely hairy; muzzle very small, black; the mouth rather small, the cutting teeth exposed, rounded and smooth in front, white; the whiskers very long twice as long as the head, rigid, black, with two or three slender long bristles over the eye-brows; eyes moderate, rather nearer the ears than the end of the nose; the ears rounded, externally covered with dense short fur like the body, internally nakedish, black, with a distinct helix.

The limbs short; the feet covered with shortish rather adpressed hair; the fore feet short; the toes free, the two middle ones nearly equal, the inner rather shorter, and the outer shortest of all; the claws short, subequal, incurved, black, not so long as the hinder ones; the hinder feet large, with naked soles; toes free, the three inner equal, the outer rather the shortest, the two inner toes with two series of four or five bony laminae placed side by side, forming a comb-like process, and covered with some very stiff bristly incurved hair; the tail very short, cylindrical, ending in a parcel of rather rigid black tipped hairs. The animal about the size and shape of a half grown Guinea Pig. Length in the stuffed specimen from the nose to the base of the tail 9 inches, of the tail 1 inch, and the longest bristle extends about an inch beyond its tip; of the hind feet  $1\frac{1}{2}$  inch; of the ears  $\frac{3}{4}$  of an inch.

There are two specimens of this animal in the British Museum, one of which is marked in the hand-writing of my late uncle, Dr. E. W. Gray,—"C. B. Spei. Masson, 1774, appears to be a variation of No. 1," which No. 1 is probably the other specimen, which is rather larger. There are now two specimens of it living in the Museum of the Zoological Society, said to come from Barbary, and we may doubtless expect a full account of them from Mr. Bennett, in his description of the animals of that collection.

I am not aware of the same kind of process being found on the toes of any of the Mammalia; it most nearly resembles the pectinated edge of the claws of the middle toes of the feet of the Goatsuckers and Herons, it may probably be used for the same purpose to clear their coats of intruding insects, and this idea is strengthened, by the fact of the two living animals above referred to continually scratching themselves with their hind claws. Some of the Lemmings, to which these animals are most nearly allied, are peculiar for having a very curious conformation in the claw of the index finger of the hand.

I have named the species after Mr. Francis Masson, who was one of His Majesty's gardeners, and published a paper in the Philosophical Transactions lxi. (1775,) being an account of three journies from Cape Town to the southern parts of Africa, undertaken for the discovery of new plants, towards the improvement of the Royal

Botanical Garden at Kew; he introduced a number of *Ericæ*, which now ornament our greenhouses, and was a companion of Thunberg.

Fam. LEPORIDÆ.

Gen. *Chinchilla*.

CHINCHILLA, n.—*Rostrum obtusum, auriculæ longæ grandes, os parvum. Dentes primores  $\frac{3}{4}$ , pagina antica lævigata. Mol.  $\frac{1}{4}$ , lamellosi. Corpus pilis mollissimis tectum. Pedes distincti, antici graciles 5-dactyli, postici 4-dactyli, verruca hallucari brevis, unguolata. Cauda corpore brevior, pilis setiformibus tecta.*

The grinders are rootless, the upper shelving backwards, and the lower forwards, squarish, and of nearly equal size; the hinder, upper and the front lower being rather the smallest, and contracted on the outer edge so as to be rather triangular; each of the teeth appears to be formed of three plates edged with enamel, and the hindmost tooth has an additional plate; the front edge of the front plate, and the hinder edge of the other two plates are in that case thick edged, or these teeth may be formed of only two plates, with the edge of the front plate folded longitudinally on the side, as the tooth of the lower jaw has two grooves on the inner, and only one on the outer side, but the base exhibits three cavities which lead me consider them as three distinct plates; the crown is truncated and furnished with three distinct transverse ribs formed by the front edge of the first, and the hinder edge of the two hinder plates, which are rather oblique on the teeth of the upper, and very oblique in those of the lower jaw.

Skull above flattened, the nasal bone convex, very narrow, and produced in front, the intermaxillaries much compressed, and provided with a distinct keel on their upper edge. The zygomatic arch rather large, complete, nearly formed of the frontal bone, the petrous portion of the temporal bone very large, convex, the meatus auditorius very large and ovate. The lower jaw very narrow and produced in front, dilated on the sides, the first process of the upper edge short and recurved, the hinder process on the lower edges very long, produced and sharp, fitting the convexity of the large petrous portion of the temporal bone.

Length of the skull  $2\frac{1}{4}$ , breadth in the centre of the zygoma (the widest part)  $\frac{1}{10}$ ; nasal bones, breadth  $\frac{3}{8}$ , length  $\frac{7}{8}$ ; frontal bone, breadth (in narrowest part)  $\frac{1}{2}$ , length  $\frac{8}{10}$ ; parietal bones, breadth  $\frac{1}{2}$ , length  $\frac{3}{4}$ ; lower jaw, greatest length,  $\frac{5}{8}$  of an inch.

The fur very soft, downy, standing perpendicular from the body; whiskers very long and large; ears nakedish; feet covered with short, and the tail with long rigid hairs.

Cheek pouches—? Clavicles—?

*Chinchilla laniger*, n. (The Chinchilla.) Icon. t. 7. f. 1.

*Mus laniger*, *Molina*, *Chili*. 267.

*Cricetus laniger*, *Desm. Mamm.* 313.

*Lemmus laniger*, *Tiedem. Zool.* i. 476.

Woolly Mouse, *Shaw, Zool.* vii. 91.

The accompanying drawing of this animal was taken by Colonel Smith from a specimen brought to this country by the Rev. Mr. Hennah, 1827, and presented by him to Lady Knighton; and that of the skull from a specimen given to the museum of the Athenæum of Plymouth by the same gentleman, who has sent the accompanying account of its habits.

"Having obtained two specimens of the Chinchilla when at Coquimbo, I succeeded in bringing one home alive, and from having been nine months in my possession it has afforded me a favorable opportunity of observing its habits and disposition. When it was first brought to me it was about half grown, but it has since increased to the size of a rat; which animal it appears mostly to resemble. Its ears are large and much spread; its eyes dark, full and prominent, like those of a rabbit; its whiskers stiff, and when in a sitting posture longer than its body; its fore legs short, but its hind ones extremely long; its tail very muscular and covered with coarse hair; the rest of the body clothed with fur, which from its fineness has become a deservedly esteemed article for the manufacture of muffs and tippets

for the ladies. It appears to trust more to the sense of hearing than to that of sight, and indeed its auditory passages and chambers of the ears make up a full half of its head. Though clothed with so fine a fur it is susceptible of the least breath of air, and appears to be affected by the changes of the weather, playing about and enjoying itself on a dry clear day, but when it rains, sitting and moping in a corner. In its food it is very capricious, rejecting at one time what it will eat at another. It is fond of grass, kernels of nuts, apples, raisins, biscuit, but will select flowers, such as violets, primroses, &c. in preference to any other thing. It has become perfectly tame and familiar, and on being let out of its box will run and bound about the room, jump on the table, take an almond or raisin from the hand, and holding it in its forepaws whilst sitting on its gambrels, and supporting itself in that position by its tail, eat it in the same manner as the squirrel. It is, however, cautious, and often returns to its box, as if to secure a place of retreat in case of danger. Its curiosity is excessive, as well as its fondness of getting to the top of every thing, even to the shoulders and head of those who will sit still and allow it to do so; and if any piece of furniture has been moved or added in the room, it is impatient to reconnoitre it, and never rests until it has examined every part of it."

Since this was written, two years ago, I have seen several other living specimens, and Mr. Collie, the Surgeon to Captain Beechey's expedition, has sent a specimen to the British Museum, by which means I have been enabled to re-examine the teeth and verify my former description, which differs from that given from the same skull in the Zoological Journal.

Fam. BRADYPIDÆ. Gen. *Myrmecophaga*.

*M. annulata*, Desm. Enc. Meth. p. 374. n. 592. taken from Krusenstern's Voy. t. 6 is only a *Coati*, in which M. Desmarest has mistaken a root that the animal is eating for its tongue. Cuvier, Os. Fos. v. 98. has already remarked that the *Striped Ant Eater* of Pennant, from Buffon's Suppl. iii. 56, is only a *Tamandua* covered with the skin of a *Coati*.

Fam. BOVIDÆ. Gen. *Capra*.

*Capra Nubiana*, F. Cuv. and Geoff. Mamm. fasc. L.

*Capra Pallassii*, Temm. fide Spec. Mus. Leyd.

Icon. F. Cuv. Mamm. Lithog. L. t. Spicil. Zool. t. 11. f. 1.

Hab. in Egypto, J. Burton, jun. Esq. Mus. Brit.

The male of this species has been figured by M. F. Cuvier, but the female is as yet unfigured; and as Colonel Hamilton Smith was so kind as to sketch the specimen in the British Museum, I have been induced to figure it.

British Museum,  
August 1, 1830.

*Bos* (Anoa) *depressicornis*. t. 11. f. 2. 3. Gen. *Bos*.

*Antilope platyceros*, Temm. Mus. Leyd. Skin.

*Anoa depressicornis*, Smith. Griffith, Transl. Reg. Anim. Ann. Sci. Nat. xix. 100.

*Antilope Celebica*, Temm. Mus. Leyd. Skulls.

*Cornibus apice subulatis*, var. Mus. Col. Surg.

Icon. Griffith Anim. Kingd. t. .f. . Ann. Sci. Nat. xix, t. 10.

Hab. in Celebes.

Dark brown, with a small spot before the eye and 2 on each cheek; inside of the ears, alternate marks on the throat, spot on inside of knee, and spot on side of the lower legs, inside of the thighs, and spot inside of the hough white. Mus. Leyd.

The above sketch was taken by General Hardwicke from the animal while living in the Governor General's Menagerie at Barrackpoor, in 1816. It well expresses the peculiar recumbent position of the horns, and shews their alliance to the Buffaloes, from which they only differ in the horns not being bent outwards at their base. The animal is equally heavy as the species of that genus, and the leg as thick.

In the Museum of the College of Surgeons I have seen two skulls which are exceedingly similar to those of this animal, and the horns are depressed at the base like those of this species, but at about one-third of their length from the base they gradually taper, and become subcylindrical and subulate. They were brought to this country by Dr. Henderson, and probably belong to the female of a peculiar variety of this species.

Fam. SIMIADÆ.

Gen. *Macacus*.

*Macacus niger*.

*Cynocephalus niger*, Desm. 819.

*Papio niger*, Reinwardt MSS. Mus. Leyden, adult.

*Cynocephalus Malayanus*, Desm. Dict. Class H. Nat.

Icon Spic. Zool. t. 1. f. 1. jun.

Hab. in Celebes.

In the first number, I followed Desmarest, in placing this animal with *Cynocephalus*; I have since seen another living specimen at Exeter Change, and several specimens in the Leyden Museum, where I observed that the canine teeth grow to a large size in the adult animal.

Fam. CEBIDÆ.

Gen. *Lagothrix*.

*Lagothrix Humboldtii*.

I believe that *Lagothrix Humboldtii*, and *L. canus* will prove not to be distinct from one another; the one figured (t. 1. f. 2.) agrees best with *L. canus* in the Paris Museum.

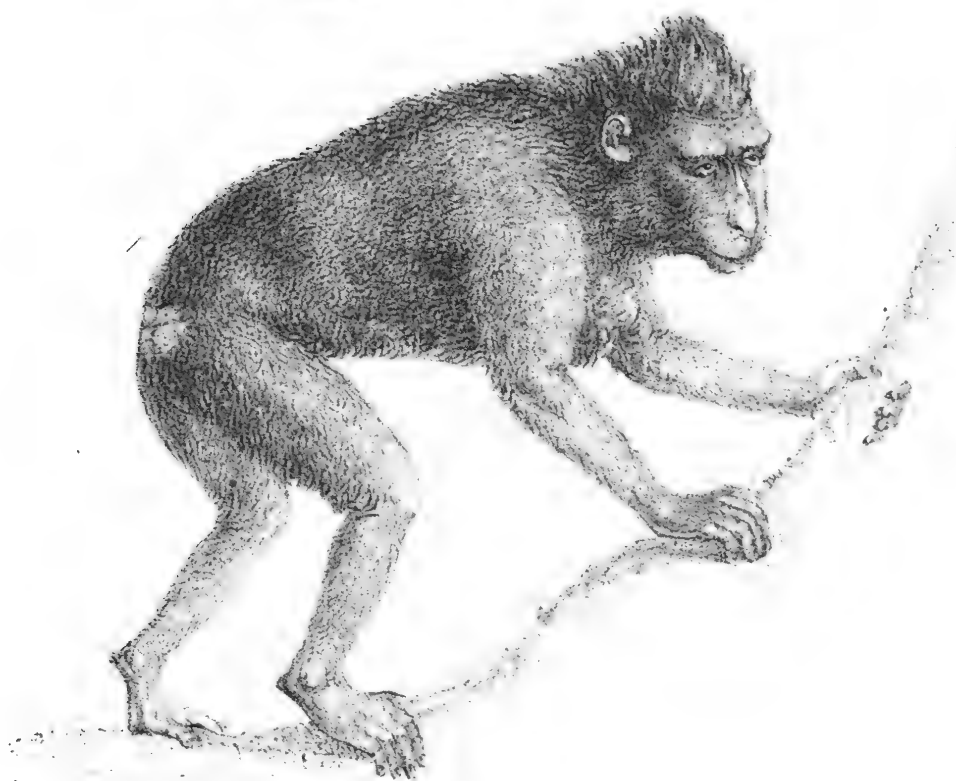
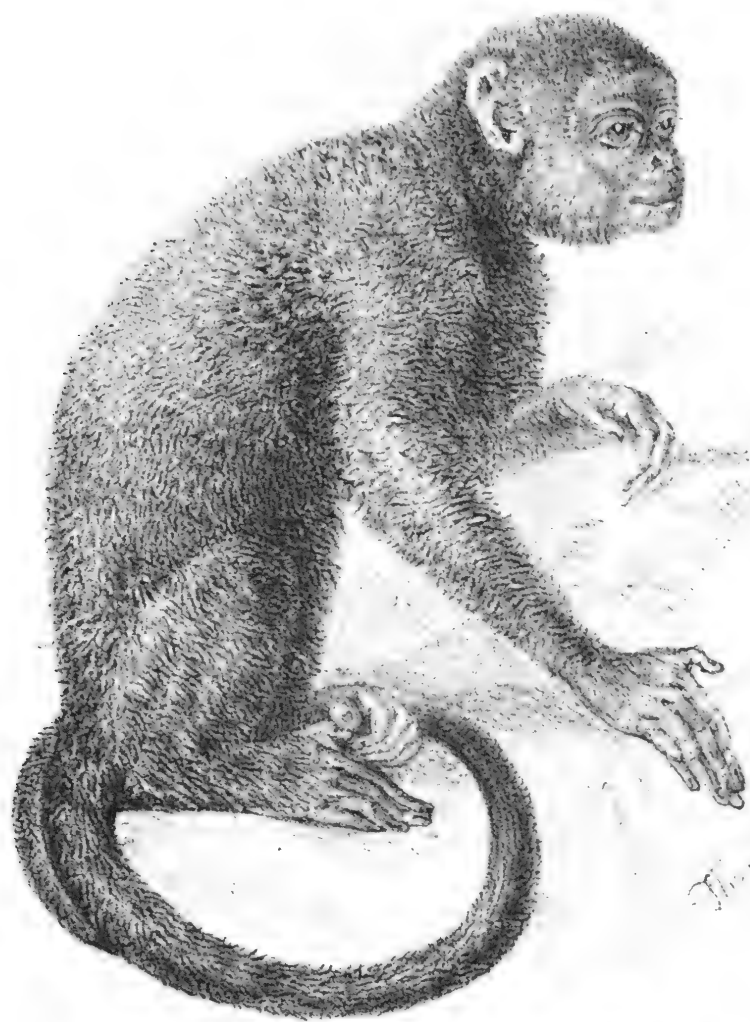




Fig. 1. -  $\frac{1}{12}$

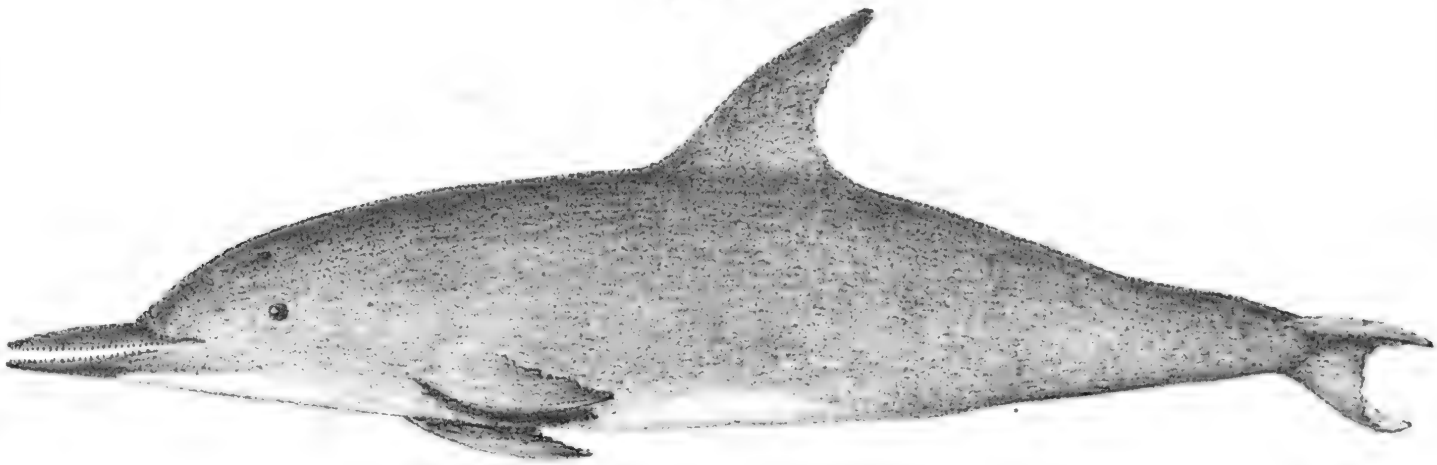


Fig. 2. -  $\frac{1}{12}$



Fig. 3. -  $\frac{1}{12}$

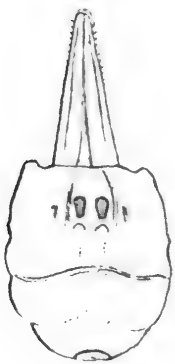


Fig. 4. -  $\frac{1}{12}$

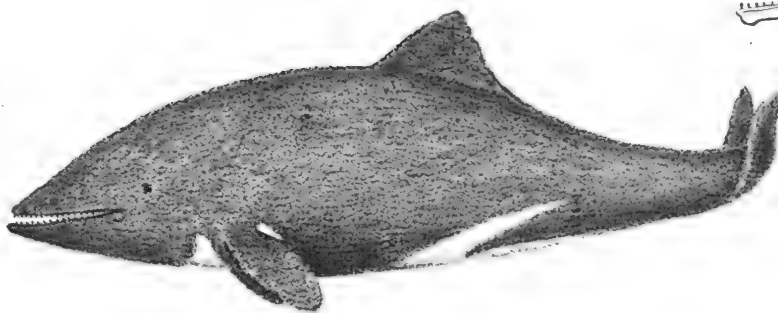


Fig. 5. -  $\frac{1}{12}$

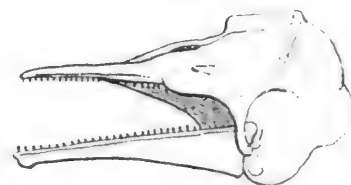
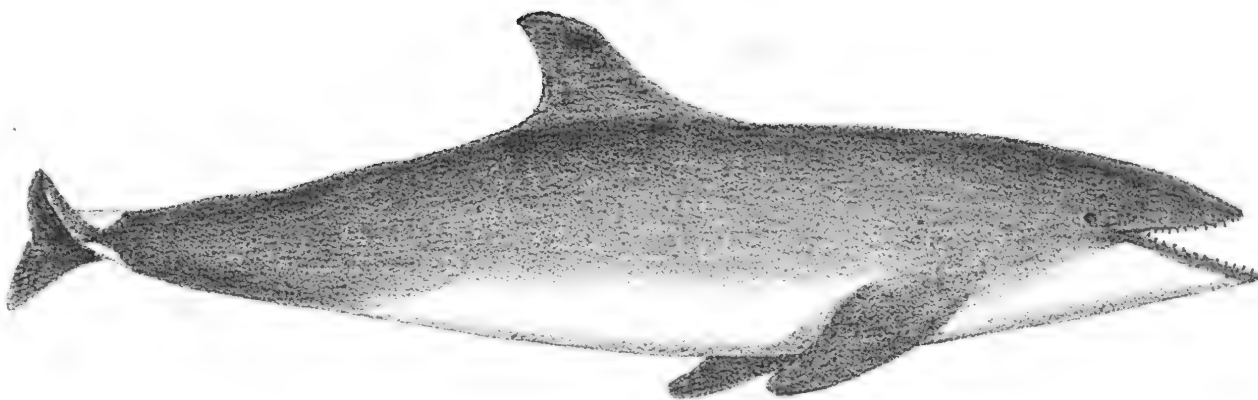
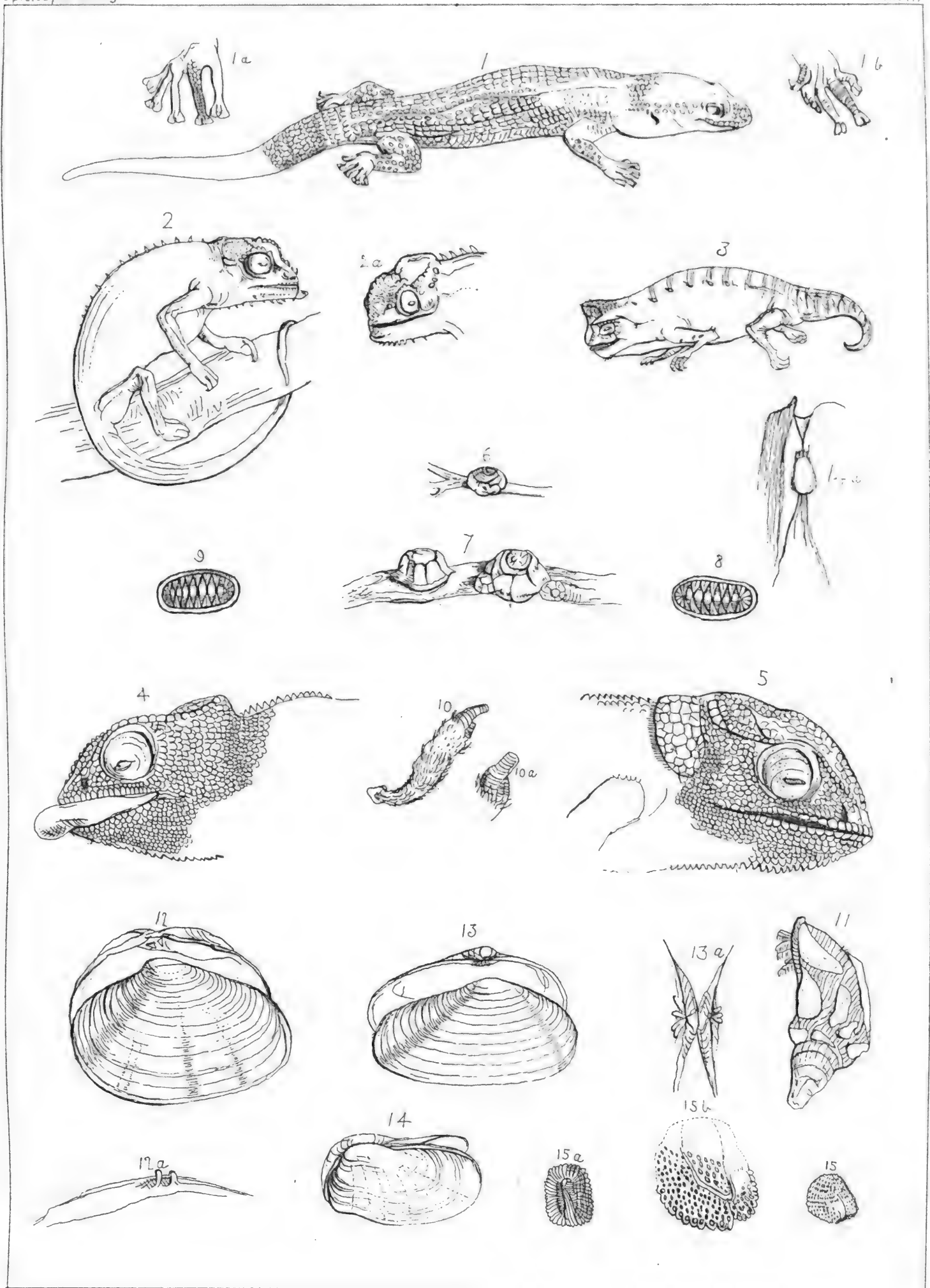


Fig. 6. -  $\frac{1}{12}$











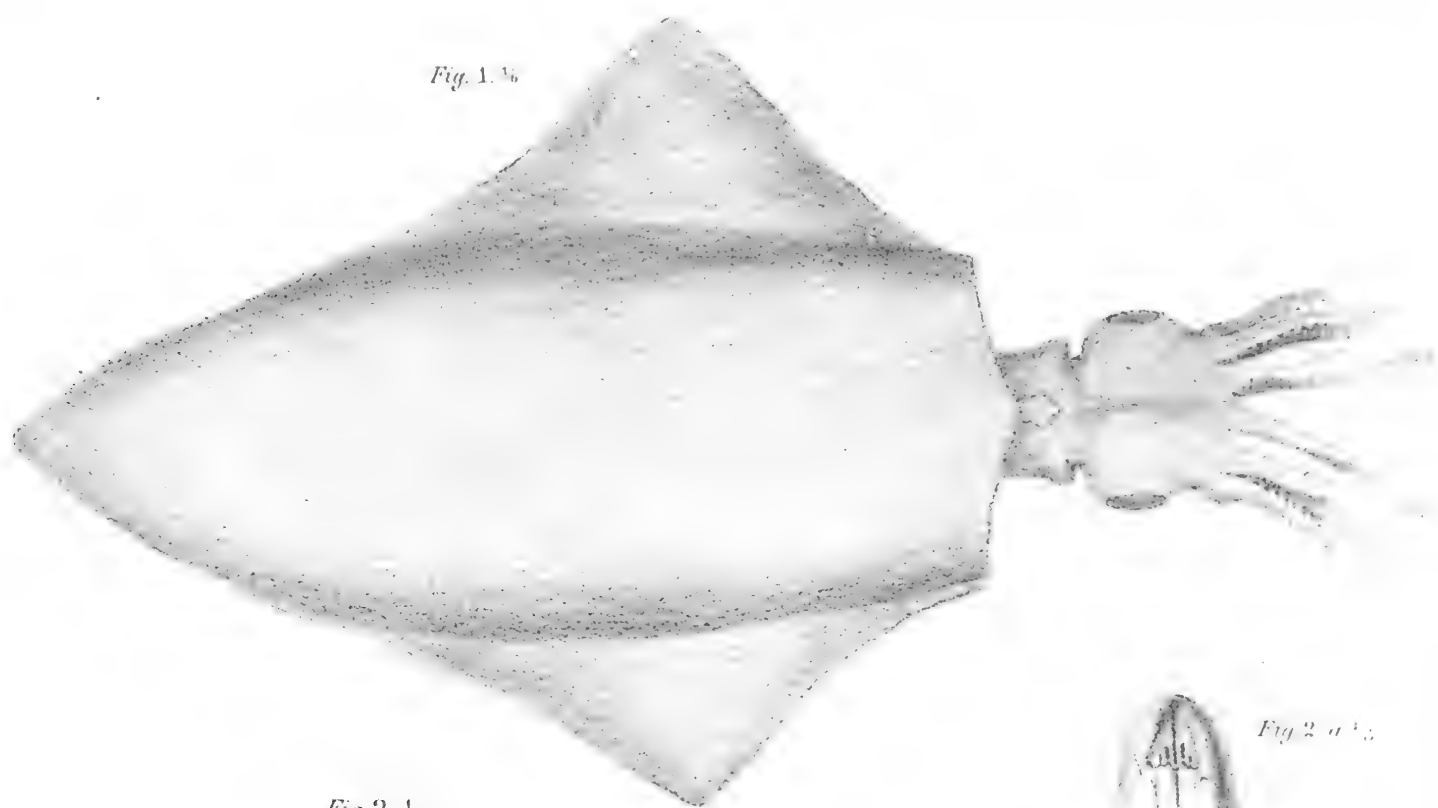


Fig. 1.  $\frac{1}{6}$

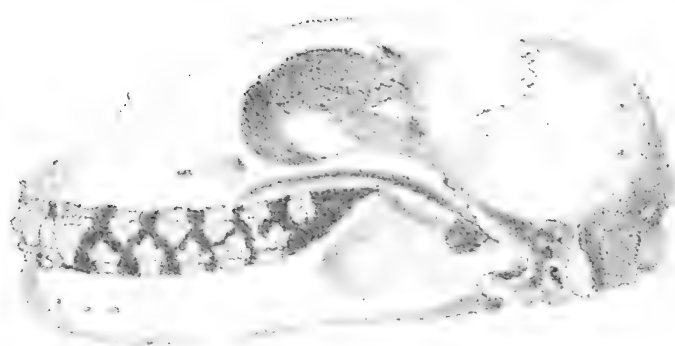


Fig. 2.  $\frac{1}{3}$

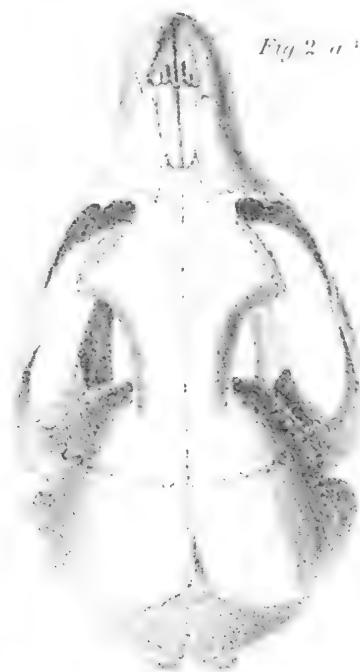


Fig. 2 a  $\frac{1}{2}$

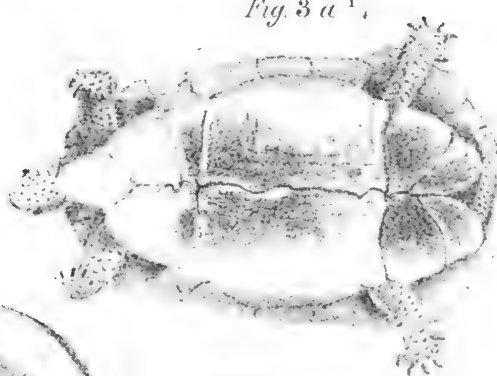


Fig. 3 a  $\frac{1}{4}$



Fig. 4.  $\frac{1}{2}$



Fig. 4. a  $\frac{1}{2}$

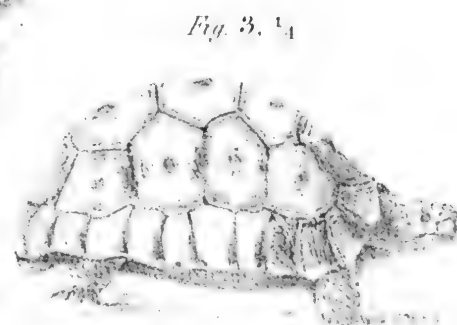


Fig. 3.  $\frac{1}{4}$





Fig. 2.



Fig. 1.

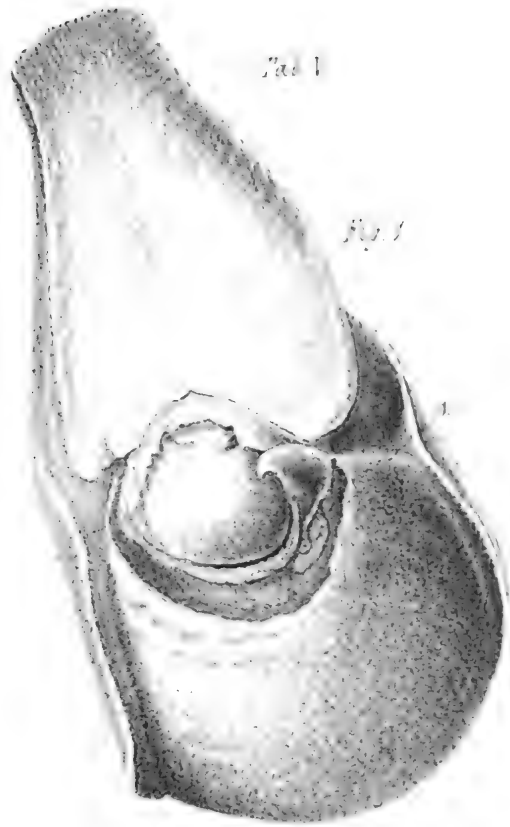


Fig. 3.



Fig. 4. a.



Fig. 5. a.

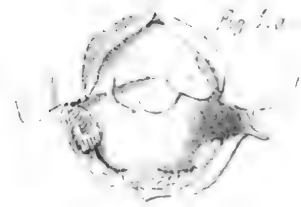


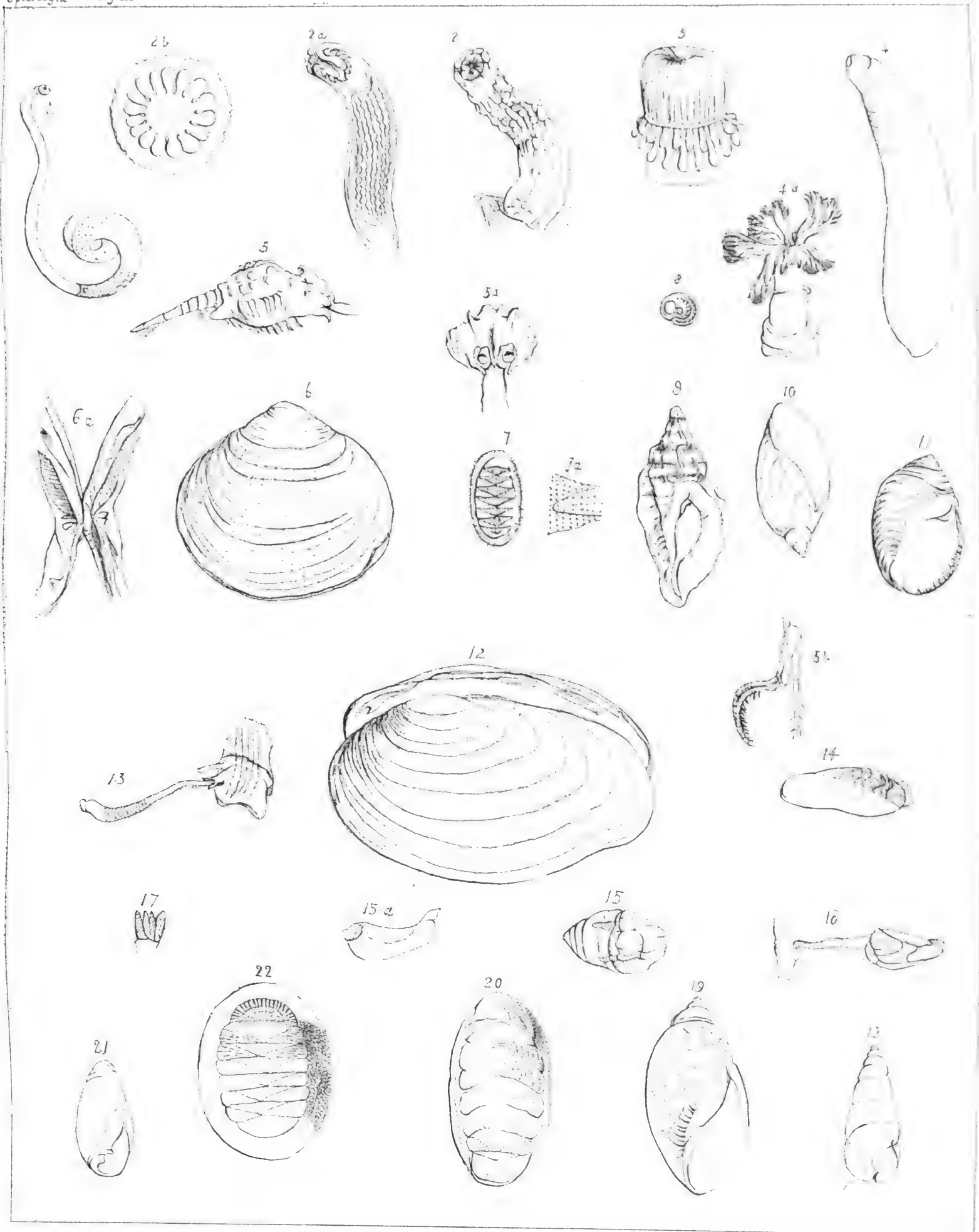
Fig. 4.



Fig. 5.



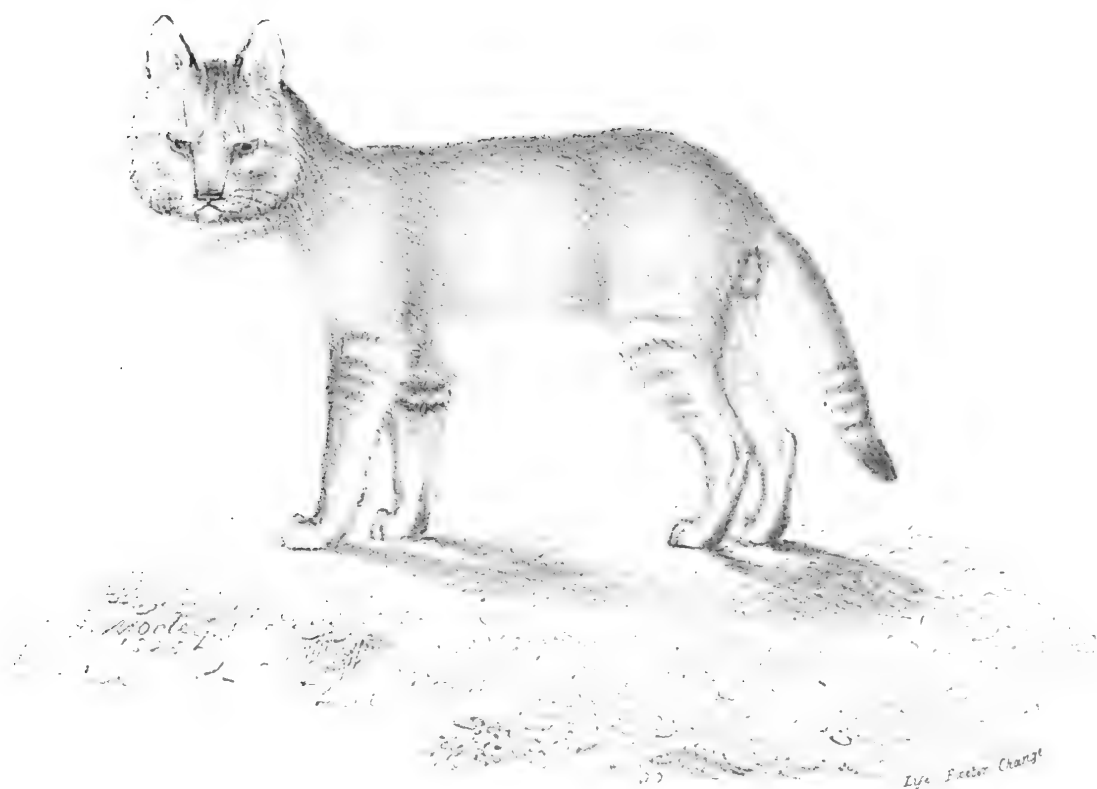








*Chinchilla*



*Bangalore Cat*

*Lys. Feller. Changt.*





WAVED CIVET, VIVERA UNDULATA.

Nepaul Gen. Hardwicke.

*Published, 1807, London, The Rev. J. Hardwicke, Esq.  
and J. G. Day.*







SQUARE SPOTTED CIVET, VIVERRA MACULATA L.

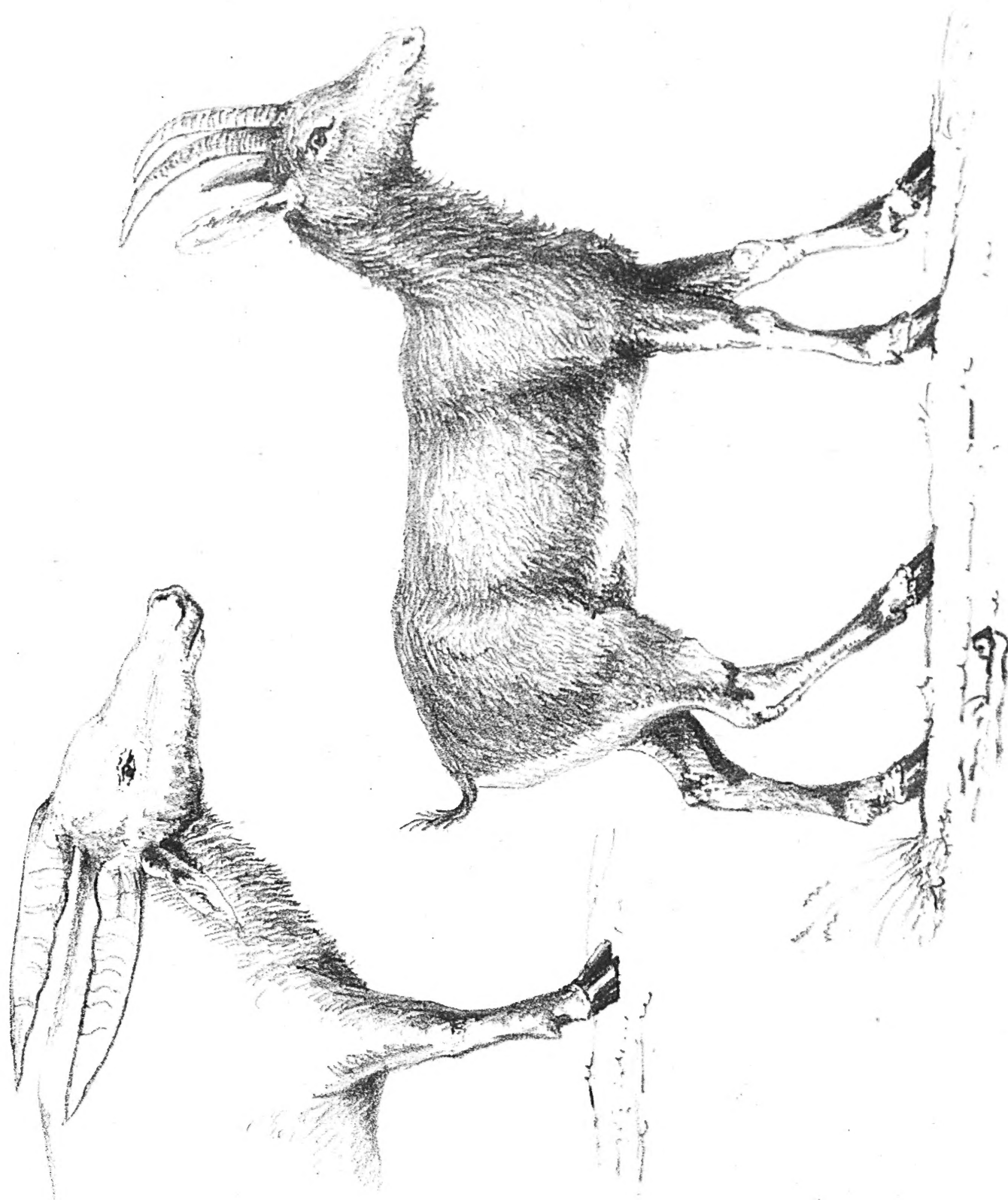
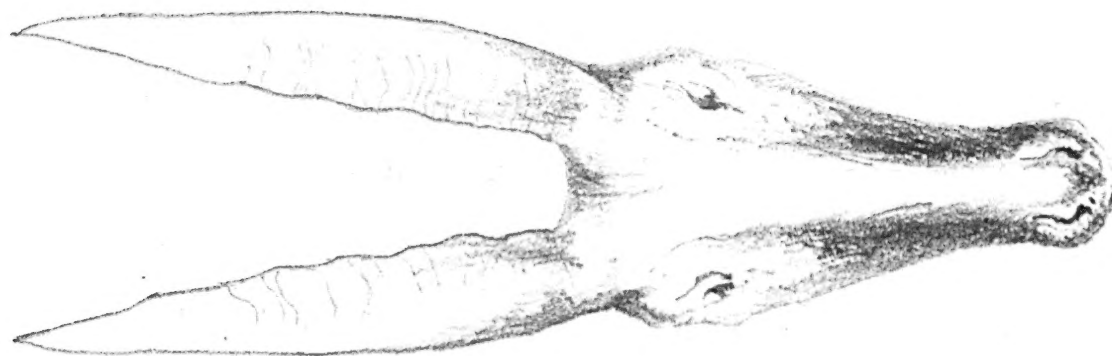
Barbary Tower, Oct. 1829.

*Published 1839 by Parbury, Allen & Co. Ludlowhall Street  
Printed by W. Day.*









62320

RB  
f591  
a779





